

BUSINESS WEEK



Roger H. Corbetta: In construction, his name means concrete (page 56)

A MCGRAW HILL PUBLICATION

DEC. 29, 1956

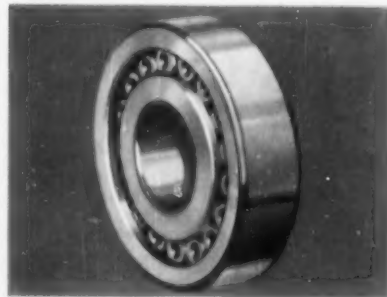
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Paul Bunyan's bowling ball proves bearings!

This game of tenpins would have been fine sport for the "great lumberman"! Yet, even Paul Bunyan would have taxed his strength in helping to clear as much as 50 acres an hour with this giant steel ball. ☆ Today's giant 'dozers, however, are doing this rugged job with ease. And, nearly every leading make is equipped with Bower Straight and Tapered Roller Bearings—proving their ability to stand up under such back-breaking pressure. That's why more manufacturers—regardless of product—depend on Bower Roller Bearings than ever before. They know that improved design plus painstaking quality control make Bower bearings last longer—require less maintenance ☆ What about *your* product? If it uses bearings, choose from Bower's complete line of tapered, straight and journal roller bearings for every field of transportation and industry.

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Two parallel shoulders, made integral with the outer race on this straight bearing, increase rigidity and durability—keep rollers in proper alignment. Precision-made rollers and races assure quieter, smoother operation.



BOWER

ROLLER BEARINGS

GENERAL BUSINESS

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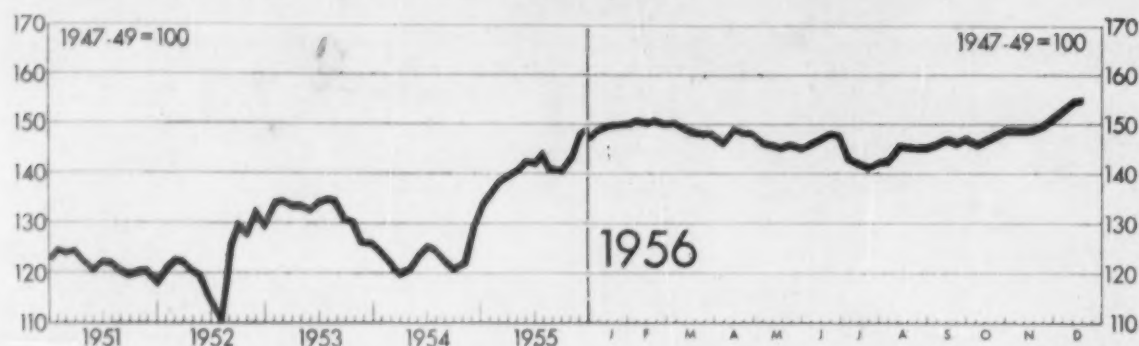
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BUSINESS WEEK INDEX (chart)

PRODUCTION

	1946 Average	Year Ago	Month Ago	Week Ago	\$ Latest Week
Steel ingot (thous. of tons).....	1,281	2,309	2,489	12,525	2,370
Automobiles and trucks.....	62,880	177,252	146,991	119,168	188,439
Engineering const. awards (Eng. News-Rec. 4-wk daily av. in thous.).....	\$17,083	\$63,148	\$62,981	\$73,264	\$72,283
Electric power (millions of kilowatt-hours).....	4,238	11,614	11,439	12,220	12,225
Crude oil and condensate (daily av., thous. of bbls.).....	4,751	6,992	7,195	7,355	N.A.
Bituminous coal (daily av., thous. of tons).....	1,745	1,781	1,797	11,773	1,777
Paperboard (tons).....	167,269	286,600	260,253	281,309	N.A.

TRADE

Carloadings: miscellaneous and L.e.L. (daily av., thous. of cars).....	82	71	72	72	70
Carloadings: all others (daily av., thous. of cars).....	53	48	55	51	49
Department store sales index (1947-49 = 100, not seasonally adjusted)....	90	255	151	1227	260
Business failures (Dun & Bradstreet, number).....	22	181	207	249	214

PRICES

Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100).....	311.9	404.9	435.0	439.4	440.7
Industrial raw materials, daily index (BLS, 1947-49 = 100).....	1173.2	101.9	101.0	100.2	99.8
Foodstuffs, daily index (BLS, 1947-49 = 100).....	1175.4	74.7	83.8	82.6	82.3
Print cloth (spot and nearby, yd.).....	17.5¢	20.8¢	19.1¢	19.0¢	18.8¢
Finished steel, index (BLS, 1947-49 = 100).....	1176.4	155.3	168.8	168.8	169.2
Scrap steel composite (Iron Age, ton).....	\$20.27	\$53.00	\$64.33	\$64.50	\$63.50
Copper (electrolytic, delivered price, E & MJ, lb.).....	14.045¢	43.369¢	35.988¢	35.955¢	35.931¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$1.97	\$2.25	\$2.36	\$2.34	N.A.
Cotton, daily price (middling, 1 in., 14 designated markets, lb.).....	**30.56¢	34.89¢	33.19¢	33.14¢	33.15¢
Wool tops (Boston, lb.).....	\$1.51	\$1.70	\$2.03	\$2.20	\$2.20

FINANCE

90 stocks, price index (Standard & Poor's).....	135.7	359.7	356.1	369.6	367.5
Medium grade corporate bond yield (Baa issues, Moody's).....	3.05%	3.63%	4.29%	4.37%	4.39%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate).....	¾-1%	3%	3%	3%	3%

BANKING (Millions of Dollars)

Demand deposits adjusted, reporting member banks.....	145,820	58,739	55,900	158,266	58,137
Total loans and investments, reporting member banks.....	171,916	86,846	86,431	186,473	87,674
Commercial and agricultural loans, reporting member banks.....	19,299	26,627	30,449	130,811	31,253
U. S. gov't guaranteed obligations held, reporting member banks.....	149,879	30,260	26,254	125,884	26,541
Total federal reserve credit outstanding.....	23,888	27,101	26,266	26,633	27,223

MONTHLY FIGURES OF THE WEEK

MONTHLY FIGURES OF THE WEEK		1946 Average	Year Ago	Month Ago	Latest Month	
Cost of living (U. S. Dept. of Labor BLS, 1947-49 = 100).....		November	83.4	115.0	117.7	117.8
McGraw-Hill Indexes of New Orders (1950 = 100)						
New orders for machinery, except electrical.....		November	N.A.	151	144	148
Construction & mining machinery.....		November	N.A.	168	148	190
Engines & Turbines.....		November	N.A.	164	134	140
Pumps & compressors.....		November	N.A.	150	208	152
Metalworking machinery.....		November	N.A.	218	164	137
Other industrial machinery.....		November	N.A.	122	123	128
Office equipment.....		November	N.A.	123	143	143
New contracts for industrial building.....		November	N.A.	171	205	220

* Preliminary, week ended December 22, 1956.

† Revised.

†† Estimate.

‡ Ten designated markets, middling 11 in.

N.A.—Not available.

§ Date for 'Latest Week' on each series on request.

THE PICTURES—Associated Photographers—25; Black Star—79; Colorado Fuel & Iron Corp.—31; Grant Compton—cover, 56, 57; Corbetta Construction Corp.—59; French Embassy Press & Information Division—77; Guy Gillette—68, 69; Herb Kratochvil—32, 33, 34, 50; Guido Orsanchi—76; Sovfoto—27; W.W.—71.

"VISION IS INDISPENSABLE TO PROGRESS"



From beans to battleships —the industry that wraps up progress

How many wrappers, tubes, bags, boxes, bottles and cans did you open this week?

Last year an estimated 255 billion packages were produced to protect products for shipment, display and sale. More than \$10 billion was spent for packaging materials alone—paper, glass, fibers, plastics, metal, wood and textiles.

In eye-catching displays, colorful, appealing packages rate high in creating sales. Modern packaging has also added new dimensions of convenience, orderliness and cleanliness

compared with the "cracker barrel" days of only 40 or 50 years ago.

Latest industry advances include transparent polyethylene—wonder plastic of food protection; heat-proof foils; amazing wet-strength papers; flexible, collapsible vinyl tubes.

Equipment that rolls out 450 cans a minute, X-ray inspection for high-speed canning, and new labeling

and printing methods are among other new and improved techniques.

"Packaging" can handle almost any demand—from tiny capsules to "mothballing" huge naval ships. Modern packaging typifies the imaginative, productive spirit stimulated by a free economy with the goal of greater abundance and happier living for all.

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16 Wall Street, New York 15, N. Y. Rector 2-8900



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"Widow maker" foiled. If it hadn't been for the constant reminder to wear his hard hat in the woods, Gary Meece might have been killed. Gary (at right) shows dent made in his hat by a falling hemlock branch to his friend George Babich, Employers Mutuals safety engineer (left) and Ed Seabloom, logging manager for E. K. Wood Lumber Company.

Wausau Story

IN THE PACIFIC NORTHWEST

by LAMAR NEWKIRK, business page editor, Portland's Oregon Journal

"I found that the Employers Mutuals people know and talk the loggers' language when they work with our Oregon lumber industry. Naturally, because Wausau was once lumber country, too. And when their men, like safety engineer George Babich discuss safety practices they're thinking of good friends—not just names on a payroll. That's one reason their policyholders like the E. K. Wood Lumber Company have been able to get out over 300 million board feet of logs during the past 12 years with only one major accident.

"But the Wausau story out here isn't all lumber. It's evident in the Oregon Pear industry, too. Employers Mutuals believes people are safer workers if they are happy both on the job and after hours. So one of their nurses, Maryon Smith, has spent much time working with the pear industry to provide better housing and sanitation for migrant pear pickers and their families. That too brings better safety results, they tell me."



We talk your language, too. Employers Mutuals, with offices across the country, writes all lines of fire and casualty insurance. We are one of the largest in the field of workmen's compensation. For further information see your nearest representative (consult your telephone directory) or write us in Wausau, Wisconsin.

Employers Mutuals of Wausau



Singin' in the shower. Young son of migrant pear orchard worker enjoys one of the modern conveniences at housing unit—just as his dad does after work. Better housing results in better work. Safer work too. That's a new slant on safety by Employers Mutuals.



"Good people to do business with"

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BUSINESS WEEK • Dec. 29, 1956

READERS REPORT

Drafting by Machine

Dear Sir:

Re your GE news item [BW—Nov. 3 '56, p105] there is nothing new regarding the use of computing machines by GE for personnel assignment. During World War II, the Navy called up personnel and classified them by means of IBM cards. Many a draft was formed through that method.

GEORGE V. LAROW

HOUSTON, TEX.

• It is new for non-military purposes, we believe.

Oil Before Shale

Dear Sir:

... I have read with interest the article Is Shale Oil Ready to Compete? [BW—Dec. 1 '56, p99]. I think you have in a general way presented the subject very well.

[However] our company is mentioned in this article with our name quoted wrongly. You mention "The Shale Oil Corp.," whereas our name is The Oil Shale Corp. . . .

H. E. LINDEN

THE OIL SHALE CORP.
 BEVERLY HILLS, CALIF.

Luring Manpower

Dear Sir:

I have read your article entitled Luring Manpower from Overseas [BW—Nov. 10 '56, p190] with interest, and I doubt whether the American public has any idea of the ill will which we are creating by these methods. On one hand we are luring away from our friends overseas the one commodity which is shortest in supply and which is most vital to their success, namely technical manpower, while on the other hand we are trying to win their friendship, and by loans and gifts help them to success. There is no surer way of destroying a friendship than that of trying to steal the thing which is most important to the friend. This is precisely what we are doing in our shortsighted raids for technical personnel. We would do well to reduce the waste of engineering manpower which often results from poor organization, before we try to compensate for the deficiency by robbing our friends overseas.

Although my company is relatively small, we are doing a substantial amount of business with

LOOK TO

OTTAWA STEEL DIVISION OF LAYCO designs, engineers and produces a complete line of specialized hydraulic powered attachments for industrial tractors—front end loaders, backhoes, pavement breakers and tampers, dozers and crane hooks. Also, versatile self-propelled, Hydra-Hammer multi-purpose machines. Heavy-duty outdoor Fork-Lift trucks. Sold and serviced through Ottawa dealers across the nation and in many foreign countries.



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L. A. YOUNG



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number of operations each man can perform with each machine.

You'll find Ottawa equipment speeding up work and increasing productivity *per man* and *per machine* in construction work of all kinds . . . road building, maintenance and repair . . . for public utilities and

municipal projects . . . and wherever materials are handled and transported by modern mechanized methods.

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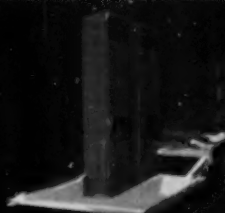


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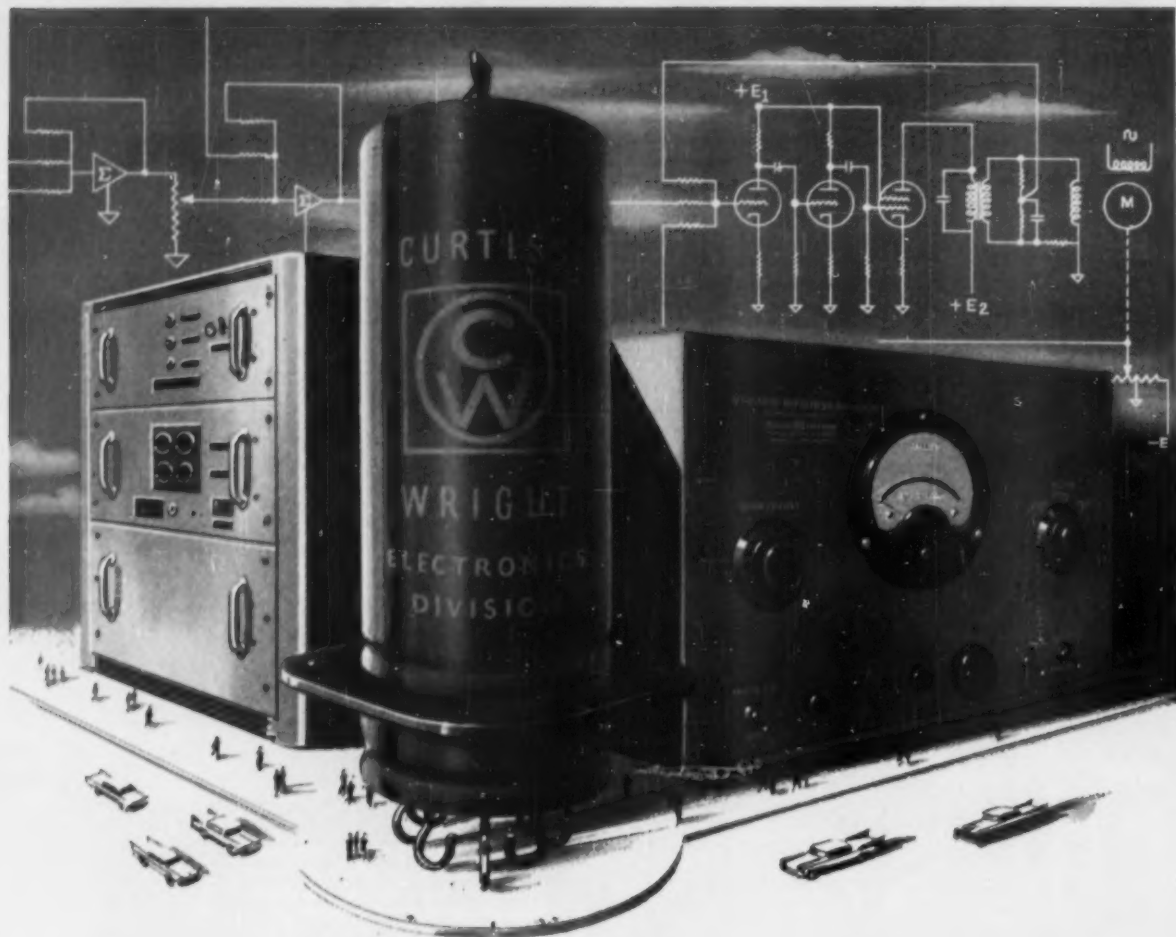
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Speedlift Power Gates. Up to 4,000 lb. capacity. One man operation. Lifts and lowers loads safely in less time at lower costs for all trucks and trailers.



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CONTROL CENTER for complex electronic circuits



Many of today's most complex electronic systems—the type used in nuclear reactor control, for example—only work effectively when power is extremely pure, when on-off circuits are accurate and hair-triggered, and when there is capacity to measure the nearly unmeasurable.

This calls for control centers built around advanced-design components from Curtiss-Wright's Electronics Division, such as (left to right above): the Distortion Eliminating Voltage Regulator, which purifies power at the source . . . the "Snapper" Thermal Time Delay Relay that tells important voltages when and when not to flow . . . the Dynamic Capacitor Electrometer, which can measure currents as slight as those that pass from one of your fingers to the other.

In electronics, as in aviation and other advanced engineering and scientific fields, Curtiss-Wright is finding new and better ways to get important jobs done.

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Here's how GLIDDEN helped bring the washer out of hiding

Fifty years ago, women used hand-operated, wooden-tub washers like the 1907 MAYTAG. Built for utility, not beauty, these units were generally kept out of sight.

Today's homemaker, however, knows that the NUBELITE finish on her new MAYTAG "All-Fabric" automatic, and matching "No-Vent" dryer, adds sparkling beauty to her home.

But the people at MAYTAG, who recently

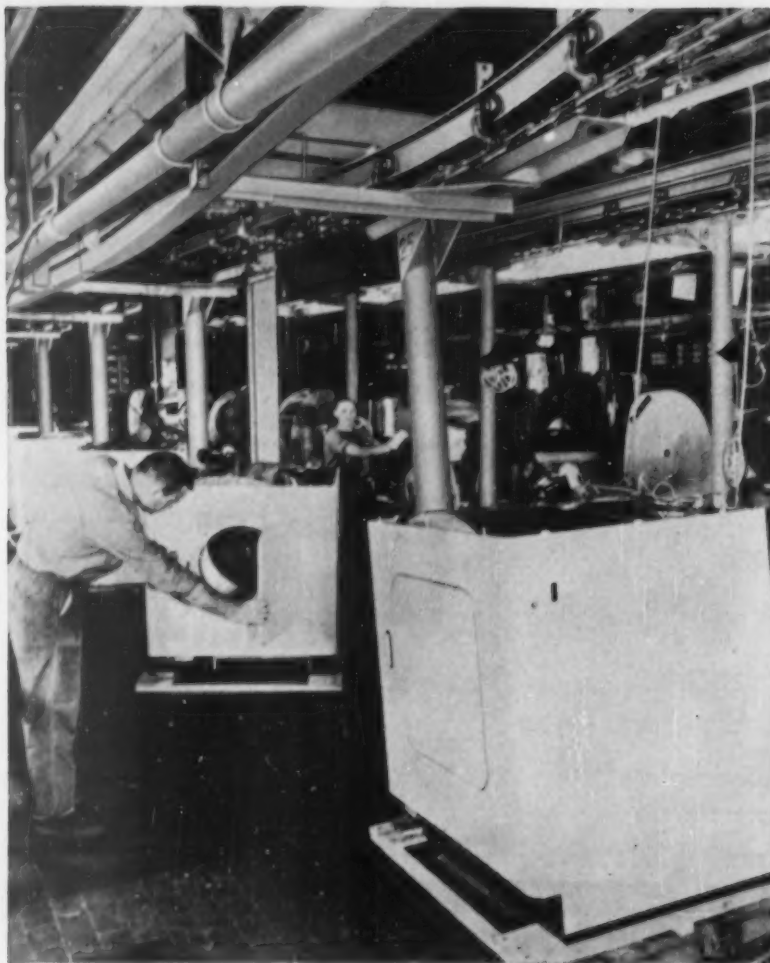
produced their *ten-millionth washer*, realize that a product finish must offer complete surface protection as well as beauty, must resist heat, corrosion and other damage, stay new-looking for years.

That's why they, like other leading manufacturers, specify Glidden NUBELITE primers and enamels which provide all of the film-building and specific resistance qualities required for maximum appliance life.



The Glidden Company, Industrial Finishes Division, 900 Union Commerce Building, Cleveland 14, Ohio. Sales Offices and Factories: San Francisco, Los Angeles, Chicago (Nubian Division — 1855 N. Leclair Avenue), Minneapolis, St. Louis, New Orleans, Cleveland, Atlanta, Reading, Canada: Toronto and Montreal.

Industrial Finishes for Every Product



Dryers grow on carriers *in modern appliance plants*

This is a final assembly line designed by MHS for production of electric clothes dryers. A dryer grows on each carrier of the overhead conveyor, moving at a steady pace, growing as it goes. Testing and final inspection are done on the moving conveyor.

The carriers, held vertical by outriggers, may be rotated through a full 360°. Assemblers work swiftly and surely, with less effort. High quality dryers are built at less cost.

Your production, too, can benefit by the imaginative thinking, ingenious design and practical engineering available at Mechanical Handling Systems. Scientific material handling and production systems can cut your costs, raise product quality, bring you competitive advantages.

call in the MHS engineer now!



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European countries in the field of electronics. We have chosen, however, to establish subsidiary corporations both in England and France, and to use engineers on their home ground. We get the benefit of their very capable technical work reflected here in the U. S. company, and also strengthen rather than weaken technical developments in Europe by freely supplying our technical knowhow to our associates in the subsidiaries.

BERNARD S. BENSON

PRESIDENT
BENSON-LEHNER CORP.
LOS ANGELES, CALIF.

More Architects Agree

Dear Sir:

The entire architectural profession should be grateful for your Personal Business article [BW—Dec 1'56, p149].

Our firm does not design custom housing, but my partners and I feel that your story gives an excellent background to the general public on services of an architect.

S. KENNETH JOHNSON

DANIEL, MANN, JOHNSON, &
MENDENHALL
LOS ANGELES, CALIF.

Dear Sir:

Your Personal Business article has been perused by a number of members of the A.I.A. Philadelphia Chapter and was presented and discussed at the executive committee meeting of this chapter. . . . Following discussion it was unanimously passed that [I] write you, expressing appreciation of this chapter for such a lucid article in connection with architectural services. . . .

DAVID H. MORGAN

PRESIDENT
PHILADELPHIA CHAPTER
AMERICAN INSTITUTE OF
ARCHITECTS
PHILADELPHIA, PA.

The Fourth Estate

Dear Sir:

Your helpful hints for good press relations [BW—Nov. 24'56, p177] should be heeded by one and all. Yet it seems to me that one point could well be emphasized.

. . . Much of the difficulty in dealing with the press stems from the tendency on the part of many executives, and even more so by my fellow public relations practitioners, to regard members of the fourth estate as a class apart from ordinary mortals.

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To promote the science and improve the methods of fire protection and prevention; to obtain and circulate information on these subjects and to secure the co-operation of its members and the public in establishing proper safeguards against loss of life and property by fire.

OCCUPANCY FIRE RECORD RETAIL LUMBER YARDS



APRIL 19, 1956, KLAMATH FALLS, ORE.,

\$100,000 - Fire protection weaknesses that caused this fire are responsible for most of the serious fires in retail lumber yards. The lumber and building supplies storage sheds were unsprinklered, sheds were combustible and congested, and no watchman or automatic fire detection equipment was provided. The fire was beyond control in an undivided 400-ft.-long lumber shed when discovered by a

passing taxi driver at 4:26 A.M.

AUGUST 5, 1954, GREAT FALLS, MONT.,

\$1,400 - Hot ashes left in an uncovered metal barrel set fire to a wall of this wooden storage building. Operation of one sprinkler practically extinguished the fire and caused the water-flow alarm to ring which was heard by the watchman. Responding to the watchman's telephone alarm firemen found the fire practically extinguished.

AUTOMATIC SPRINKLERS MAKE THE DIFFERENCE! Fire records are grim reminders that there is no substitute for instant, automatic, around-the-clock sprinkler protection. Without sprinklers, the efforts of an entire lifetime can be wiped out in a matter of moments.

Is anything worth that risk — especially when you consider that the installation of a Grinnell Automatic Sprinkler System reduces fire insurance premiums from 50% to 90%. Grinnell Sprinklers are an investment that

not only pay for themselves, but then start paying you a substantial cash dividend.

We shall gladly survey your property and submit an estimate, without cost or obligation. Write or phone Grinnell Company, Inc., 265 West Exchange Street, Providence 1, R. I.



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SPECIAL APPLICATION FRACTIONAL HORSEPOWER **MOTORS**



Capacitor-type motor
for wire recorder.

Aircraft pressurizing
pump motor.

Turbine for canister-
type vacuum cleaner.

The attitude seems to be that unlike honest, forthright individuals, members of the press are always out to "get" you and it is best, therefore, to be on guard at all times. This is an unfortunate misconception which leads to unhappy experiences.

Aside from the few who delight in making executives and PR people squirm, and this is an almost extinct breed, I find that friendly, courteous, and considerate treatment is all that press people want and expect. They're busy people with a job to do. And they don't appreciate being trifled with, stalled, misled, or lied to any more than a busy businessman would.

By applying rules of conduct "normal" to most business situations, and by observing the points you make, one need have no concern about meeting and dealing with the press.

JACK BERNSTEIN

VICE-PRESIDENT
WYLE ASSOCIATES, INC.
NEW YORK, N. Y.

Dear Sir:

Both business in general and the so-called working press should be grateful to you for the lucidly simple "rules" for good press relations so well laid down in *Personal Business*.

The paradox is that so many of these principles, self-evident as they should be, are so often violated by men who can truthfully say, cliché though it may be, that "I used to be a newspaperman myself."

JOHN C. OTTINGER, JR.
WESTPORT, CONN.

Just a Suggestion

Dear Sir:

. . . Your Trend Remember Hungary [BW—Dec. 8 '56, p200] suggesting that businessmen give the money that they would spend for business gifts to charity is an unwarranted attack upon the institution of business gift giving. . . .

Your inference that a business gift is a bribe is totally unwarranted. It is true that some unscrupulous people might regard a business gift as a bribe, but most businessmen accept the gift in the spirit of friendship. It would be a very poor sort of businessman who would let his judgment of where he should buy be dictated by a business gift. . . .

MORRIS B. RABIN

PRESIDENT
THE MINUTE MAN LINE, INC.
BOSTON, MASS.



Announcing

In this modern office, J-M's new Imperial Marinite Movable Walls insure privacy, are architecturally attractive, meet changing space requirements. The corridor floor is colorful J-M Terraflex® Vinyl Asbestos Tile.

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New Johns-Manville Imperial Marinite Movable Walls offer you advantages never before combined in a noncombustible asbestos movable wall.

These new walls offer complete design and color flexibility. The panels, made of asbestos and other inorganic ingredients, are pre-finished in 3 stippled textured colors: light green, light tan and light gray. They are also available in their natural gray finish for field decoration. They can be supplied on order in stippled solid colors or other attractive textured colors.

This special hard, tough finish is scratch and stain resistant, easy to clean and just as easily touched up if damaged. It provides a decorative surface of enduring beauty and a new low in maintenance cost. To meet architectural needs, a different finish or panel

arrangement may be used on opposite faces of the partition. Imperial Marinite Walls are easy to dismantle and re-erect, come in standardized and interchangeable units.

Undivided responsibility for a complete job

Imperial Marinite flush or glazed partitions are furnished and erected by the Johns-Manville Construction Department, complete with doors, door hardware, glass and trim.

Johns-Manville Movable Walls are available in several other types to meet varying budget and architectural considerations. For free brochure describing new Imperial Marinite Walls, write Johns-Manville, Dept. BW, Box 158, New York 16, N.Y. In Canada, write 565 Lake Shore Road East, Port Credit, Ontario.

See "MEET THE PRESS" on NBC-TV, sponsored on alternate Sundays by Johns-Manville



Johns-Manville

TRADING STAMPS WIN BY LANDSLIDE IN REFERENDUM

*65% Of North Dakota Voters Approve Stamps In
First Official Test By The People Of Any State*

**Consumers Themselves Give The Decisive
Answer to Trading Stamp Opposition**

The stage was set more than a year ago—March 5, 1955. On that date the Legislature of North Dakota passed a tax law on trading stamps. If allowed to remain, it would have ended stamp distribution in North Dakota.

This law clearly discriminated in favor of one group of merchants over another. Furthermore, it ignored the rights of many thousands of housewives to enjoy a form of thrift continuously popular in the state for 40 years.

Consumers—the people who stood to lose the most in this battle among merchants—took a hand immediately. Within a short time the minimum 7,000 signatures required for a referendum were obtained.

Thus it happened on Election Day, November 6, that the people of North Dakota participated in the first test of its kind in the United States—one where the people themselves could declare by vote their feelings about trading stamps.

On the basis of popular vote, the approval given to stamps was an even greater landslide than the 1956 presidential election. 65% voted in favor of stamps.

This clear-cut decision shows that the opposition to trading stamps does not come from consumers. And something more...consumers every day express their preference for trading stamps and they are doing it in the appropriate place—the marketplace.



NORTH DAKOTA, Nov. 6—Voters at the polls handing down their decision on the issue over trading stamps on the state's referendum. 159,801 voted "for trading stamps"; 84,319 voted "against."

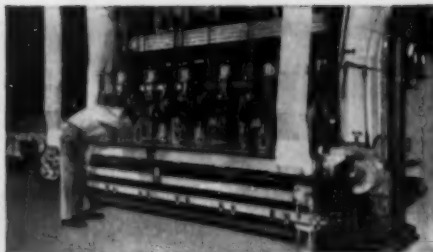


*This report is presented in the public interest by
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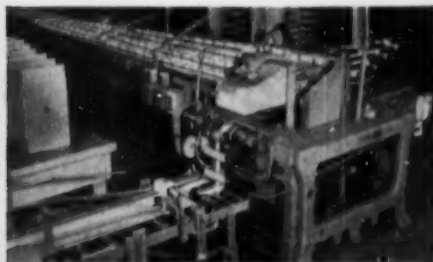
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Here's a good start
for better business
in 1957



Thank your out-of-town customers
today—by TELEPHONE—
for 1956 business



Thanking your out-of-town customers for the business they've given you during the past year is a nice and thoughtful thing to do.

Also, those companies who make a practice of thanking their customers, find it pays big dividends in increased business.

Right now, at the turn of the year, is a good time to say "Thank You." And a telephone call is by all odds the quickest and most personal way. The cost is small. The results can be big. Very big.

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Atlanta to New York	\$1.50	40¢
Los Angeles to Washington, D.C.	\$2.50	65¢

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Thomas Kearns, Traffic Manager for Garrett Corp.'s AiResearch Div., in high-altitude lab. He tells

"How we cool off a hot pilot!"

"Above the speed of sound, air friction heats up the metal skin of the newest jets to several hundred degrees. *How do you keep the pilot cool?*

"AiResearch's answer: a refrigeration system including this miraculous 2-lb. turbine. Turning at 100,000 rpm's, it cools the air entering the cabin to 40° in 2/10 of a second!

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companies located all over the country.

"How can we do it? By Air Express!

"Air Express proves its worth to us dozens of times a day, both incoming and outgoing. We literally could not maintain our schedules without it.

"Yet on most of those shipments, *Air Express saves us money*. A 10-lb. shipment from Los Angeles to Kansas City, for instance, costs \$6.34. That's 17¢ less than the next lowest priced air service!"



Air Express



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HERCULES

CHEMICAL MATERIALS FOR INDUSTRY

BUSINESS OUTLOOK

BUSINESS WEEK

DEC. 29, 1956



Look for the volume of business to grow further during 1957.

The value of all production—services as well as goods—should reach \$435-billion (and possibly \$440-billion). A gross national product of this size would be more than 5% in excess of 1956's. But there's a qualification: Part of the gain will only represent higher prices.

Physical output (which doesn't get the benefit of price increases) isn't likely to expand by more than 3%.

All three of the "big spenders" in our economy may be expected to contribute to the 1957 expansion:

- **Government outlays will be higher.** Uncle Sam's are sure to go up—probably about \$2-billion. State and local expenditures—for schools, water supply, sewers, highways—should add at least \$2-billion.
- **Business plans call for a rise of \$4-billion in plant-and-equipment outlays.** And inventories will be rising, at least for some months.
- **Consumers will buy more** (they're earning more in supplying more for government and business). And their buying will, in its turn, add to the payrolls that make it possible for them to buy.

Tightness will be a 1957 watchword—tight money, tight labor, tight materials. Business will have to scratch for all three if it is to produce as much as it hopes and expand plant as it expects.

Symptomatic of tightness will be upward pressure on prices.

Businessmen will compete with one another for materials. They will go on trying to hire skilled personnel away from one another.

In the matter of money, the competition will be mainly between business and state and local governments. Both rely pretty much on the same classes of investors for capital.

Business may find the shortages of men, money, and materials holding back some plant-and-equipment outlays in 1957 just as in 1956.

These carryovers help fatten future years. Yet they subtract from the day-to-day lift capital spending gives to the economy.

Similarly, some public works are likely to be retarded by rising costs, scarcity of credit, and higher interest rates. Tax-exempt bonds now are too plentiful to retain scarcity appeal to big investors. Interest rates are almost as high as on taxable bonds.

Consumers, as always, are the real key to the outlook.

It's pretty certain that their spending will show a good gain for 1957. Yet there will be shifts in the things they buy.

And, after the 1956 Christmas scare, merchants will be cautious.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
DEC. 29, 1956

lion, probably more. This will carry the figure above the \$280-billion mark—for another new high, of course.

Well over half of the increase will go to stores.

Retail sales, for the first time, will cross the \$200-billion mark. (The 1956 figure probably will wind up around \$193-billion.)

Durable goods—notably autos—will take a slightly larger share of the consumer dollar than in 1956 (though the ratio probably won't quite return to the 1955 level).

But the larger total of dollars spent will provide more for softgoods, too. And more for services and saving, for that matter.

Interest rates will remain high enough to attract our dollars.

At the same time, people owe more money now than ever before (even though they took on debts at a less rapid rate in 1956). This means they will be "saving" just to meet monthly payments.

People apparently saved about \$21-billion in 1956. They should do as well or better in 1957 (though, with incomes higher, this might not amount to quite so fat a percentage of after-tax earnings).

Spending-saving patterns have been a little unusual in recent months. High interest rates have provided the saving incentive. At the same time, rising prices have scared some consumers off.

This combination helps explain retailers' disappointments.

—•—

Autos face a much happier year in 1957 than the one now ending.

Retail deliveries may not be more than 5% to 7% higher (6½-million against 6.1-million or so). But, due to the cut in dealer stocks, output should run 6¾-million vs. 1956's 5.8-million.

—•—

Construction will gain in dollar volume but, as in 1956, there will be little or no over-all increase in actual work put in place.

Housing, for its part, can't look for any sharp recovery.

This will retard any major comeback in lumber, and will put a ceiling of sorts on appliances and home furnishings (although repair and alteration help offset the lower level of new homes).

—•—

Some softgoods lines will lag for a while as merchants undertake to clean up the first overstock of any magnitude in years. And manufacturers won't be adding to stocks so rapidly all through 1957 as in recent months (the slowing representing a minus for the economy).

Yet there's no real prospect of any "inventory slump."

—•—

Labor peace—to an extraordinary degree—is the prospect for the year due to the pattern-setting, long-term contracts signed last summer. And the stock market, after a year of "rolling readjustment" of its own, doesn't look dangerous—though it will remain selective.

The American Market: a Look Ahead

Grubstaked... for a week


That's a big load for the "carry-out" boy. Looks like she's bought enough food for at least a week.

Thanks to packaging, her shopping habits have changed. She makes fewer trips to the store. Today, she "bulks" her food purchases . . . fills her pantry shelves and freezer so whatever she needs is right at hand—conveniently and without waste.

Enough-for-the-week shopping is tough on the counter boy . . . but much tougher on the job that packaging must do. Today's housewife has *more* stores to go into (2000 new supermarkets built last year alone) and many more items to choose from. Food packages—today's self-service salesmen—have to sing out "help yourself" louder than ever.

Marathon, America's leading supplier of food packaging, meets this challenge with new kinds of selling packages that "stop" her as she makes her tour through the store.

At Marathon, buy-appeal is as much a part of the package as product protection. Small wonder, when you remember Marathon's unequaled experience—and Marathon's integrated control over every step of production, from tree to finished package.

MARATHON  CORPORATION
Menasha, Wisconsin

In Canada: Marathon Packages Limited, Toronto



Things look bright where **MARATHON** goes to market



Here, the excitement of the busy week

Macy's parade for the enchanted millions has special meaning for the limited few . . . Bystanders disperse, but one audience keeps tense vigil: "What's the crowd's mood?" . . . "My price — can I get it?" . . . "Production — have I enough? Too much?"

At toy and TV factories, textile mill and steel mill — State Street, Market Street, Wall Street — Business Week clocks this special season's big parade . . . the march of these too few, breathless, busy weeks that separate the businessmen from the business boys, that put the final stamp of "good" or "not-so-good" on the business year. But this week, next week, *every* week, as the underscored urgency of business surges across its pages, there are no "watchers" — *this* audience is the show, itself. 91% are management men . . . the names at the end of the editors' pencils, the news just off the wire, the influential few who set the pace and the pattern for all business. Why wouldn't Business Week rate "best-read" among management magazines? Why wouldn't your own business and industrial customers vote it "most useful"? Why wouldn't the unique business-excitement between its covers draw an unchallenged advertising volume? Sellers-to-business agree with Macy's . . . *sales come easier where excitement comes naturally.*



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How soon will you be able to see over the phone?

It may be sooner than you think. For the remarkable new Hughes TONOTRON—now used for high-fidelity transmission of maps and other navigational pictures to ships and aircraft—will make possible "face-to-face" telephone calls to and from your office or home.

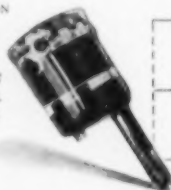
The TONOTRON is only one example of Hughes Products leadership in research and development of electron tubes and related advances in electronics, such as transistors and diodes. It is with products like these that science will bring about the dynamic electronics era—in which you will have on-the-wall television, electronic control of factory production, and countless other marvels.

As one of the country's largest electronics research and manufacturing firms, Hughes Products backs its semiconductors, cathode ray tubes, and industrial systems and controls with a long record of technical accomplishments. These include the "thinking" FALCON air-to-air missile, and the self-directing Hughes Automatic Armament Control which is standard equipment on all Air Force interceptors.

Undoubtedly there is a time- and money-saving application of Hughes electronic products to your own business. A Hughes Products sales engineer will welcome the opportunity to work with your staff. Please write: Hughes Products, Los Angeles 45, California.

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A DIVISION OF HUGHES AIRCRAFT COMPANY

Offices: They Can't Catch Up

● A few cities are taking a breather, but most see no easing of demand for more office space.

● Despite tight money, financing is no problem for builders who have the tenants signed up.

There's something irresistible about a sparkling new office building. Gaping sightseers will clog up busy traffic to catch the glint of the sun on a metal-sheathed or glass-bedecked exterior far above. And no matter how fast the new buildings shoot up, an eager stream of tenants seems ready to pour into the bright new offices inside.

At least, if there's an end to the stream, you have hard work to find it anywhere around the country this year. Office building has been one of the boomiest spots in the 1956 construction picture (BW-Oct.13'56,p20). It's true that some cities, such as Atlanta, Houston, Philadelphia, perhaps Pittsburgh, are sitting back to take a breather after a building rush of several years duration. But in other cities, BUSINESS WEEK reporters hear such statements as these from real estate and building men:

- "We don't even think about the end of this boom until the demand for any kind of space subsides. We can't wreck the buildings that are so dilapidated they have no right to exist—people still want holes in the wall if they can't get anything else." That's from Chicago.

- "Building is keeping about two jumps behind demand"—Salt Lake City.

- "New York still has a shortage of office space."

- "People are clamoring for space" in a new general-purpose office building planned in Seattle.

- **That Downtown Question**—In these and other cities the new office space is piling up high into the sky in the crowded downtown area. In a number of cities, however, if you didn't go outside the downtown section, you might think building was pretty dead. But look farther out—both in cities with some downtown building and in some that haven't had a new downtown office building since the war, or longer—and you find a different story.

In Kansas City, for example, "thousands of feet of additional office

space have been added in the last 10 years, but most of it in buildings no higher than four floors. People just aren't interested in office buildings above five stories downtown."

- **No Tight Money Blues**—Whether the new office buildings are spreading out or climbing up, they seem to be just as irresistible to the people who put up the money for them as they are to the builders and tenants. Reports from all parts of the country are almost unanimous that tight money isn't slowing down office construction—that, as in Kansas City, there's "no lack of money available" for it.

Even in Houston, where downtown building appears to have halted after a mushroom postwar growth, financing isn't the problem. "If you've got the occupants and long-term leases in your hands, you can get all kinds of money," says a Houston banker—putting into a sentence what is the prevailing view throughout the country.

Philadelphia—which puts in a minority report on most counts anyway—turns up one opinion that "tight money is putting a crimp in business expansion of office facilities." Boston, too, reports financing obstacles—but that's because of high taxes, not tight money.

- **New Looks, New Gadgets**—Conservative Boston sticks to the tried and true in architecture, but elsewhere—especially in the downtown structures—the new look of the metal-clad style, or the somewhat less dramatic glass-and-concrete, is carrying the day. Pittsburgh, which revels in aluminum and stainless steel exteriors, is blossoming out with bright blue aluminum panels on its almost completed new state office building in Gateway Center.

The new look is going inside, too. High-speed automatic elevators, acoustical ceilings and new lighting effects, and underground garages are catching on. San Francisco is going in for heliports, sun decks for employee "breaks," and even built-in music. Air condition-



ing is almost standard for new buildings—and many old ones are converting to it to stay in the race. There's always the exception to prove the rule—Seattle builders doubt if air conditioning is worth the cost in that city's climate, and nearby Tacoma's newest tower spurns it completely in favor of the winds from Puget Sound.

I. Rushing Them Up

Just how much steam there is in office building in any individual city depends in good part on how soon it started trying to catch up with post-war demand—on just when the dam broke that had been holding up building in most places through the 1930s and a large hunk of the 1940s.

Chicago, where the boom is perhaps more enthusiastic than anywhere else, got started late. From 1934 to 1954, not a single office building went up in the downtown area. Now it has the Sinclair Building, opened in August, 1954, and the Prudential, its tallest (42 stories), and a flock of big ones are under way—led by Inland Steel's 19-story building that will be ready for renting next November. You can rent old space for anywhere from \$2.50 per sq. ft. to \$6.50; choice space in a new building goes up to \$8.

Seattle is even further behind than Chicago. Though there have been special purpose buildings, the first general office building since 1930 is still in the late planning stage. Announcements are expected in the next two months on two such buildings. As a result, Class A downtown space is chock full.

Pittsburgh, on the other hand, has seen a great rash of office building in the past decade—Gateway Center, U.S. Steel's stainless-clad skyscraper, Alcoa's aluminum-clad building. The Alcoa building will soon be wholly owner-occupied. Gateway Center is filling out rapidly. Over-all, Pittsburgh occupancy is put at 94.2%, with the vacant space mostly in older buildings. Yet new plans and buildings are popping up all the time—the new state office building nearly finished, an H. K. Porter Co. structure soon to go up, and others. The consensus is that the new space will all be taken—but that perhaps, for a while, Pittsburgh won't need another entire new office building.

New York is insatiable. Since World War II, it has added some 19-million sq. ft. of office space—an amount greater than all the office space available in any other city in the world, except Chicago. Vacancies are up slightly, 1.4% this year against 1.2% last year. Yet this is low compared to most cities, and vacancies are all in older buildings. In just the last few months plans have been filed for four midtown buildings totaling some 3.5-million sq. ft. of

rentable space. In New York, in contrast to many cities, the great majority of new office structures go up as rental projects, not company office buildings.

San Francisco shows a steady, gradual rise in building; two were completed this year, and six others are on the way or about to start, most of them downtown. Across the bay, Oakland is staging a real boom; by the fall of 1959 it will have almost tripled its 1956 office space.

Salt Lake City has been at it on a comparatively large scale ever since 1947, but it's still going strong. Pacific Northwest Pipeline Corp. plans a new building next spring. A banker says, "New companies are moving into this area frequently, and as long as that goes on, we'll be putting up new buildings."

II. Spreading Them Out

Some cities just never have been able to get a downtown building boom under way, or are only now making a feeble effort at it—yet they have added plenty of office space.

Detroit is one of these. Except for public buildings, it hasn't had a single new downtown office building since 1931, though ground is now being cleared for a new 12-story headquarters building of the National Bank of Detroit. The reason: Most business is oriented to the auto industry, and auto plant headquarters are on the fringes of the city or in the suburbs. So, many office buildings—some one or two-story, others bigger like the new Ford headquarters building at Dearborn—have gone up in outlying areas. Downtown occupancy is about 95%, rents from \$3 to \$5 per sq. ft.

Cleveland, where a new downtown office building (the \$17-million, 22-story CEI Building, named for the Cleveland Electric Illuminating Co.) is under construction, the first in 25 years, lagged for a different reason. The fabulous Van Sweringen brothers did so much building the city had to wait for demand to catch up. But since 1950, Cleveland has had a similar spreading-out pattern: About \$10.5-million has gone into two, three, and four-story office buildings on the downtown fringe.

Cincinnati can't get any skyscrapers off the drawing board, though two companies—Procter & Gamble Co., and Federated Department Stores—have built or are building new corporate headquarters. But Cincinnati, too, has seen a rash of company office buildings go up in the suburbs as "showcases."

III. Best of Both Worlds

There are other cities that try to make the best of both downtown and the outlying areas. You might expect

Los Angeles, with its broad area and its downtown heart, to be one of those—and you'd be right. But in spite of the sprawling city map, the "hot" areas for office building are rather small and confined. Besides the downtown area itself, there's the Ambassador Hotel district about four miles west, on Wilshire Blvd.

The first buildings in this area didn't "take" very well, though, when they were put up in 1951. But the latest one, the new Tishman building completed just last spring, was filled before it was finished.

Los Angeles hasn't had a real building "boom," but a significant break in office construction came a couple of years ago—and the city is betting on an even brighter future now that it has removed its 13-story height limit.

Jacksonville has only recently joined the office building procession. In 1955, for the first time in decades, two buildings added nearly 300,000 sq. ft. of rentable space. But next year work will start on two, possibly three more. Jacksonville is also blossoming out with a lot of one-story, motel-type office structures in its outlying sections.

IV. Hanging Back

At the opposite extreme from cities like Chicago and Seattle, just breathlessly trying to catch up with the parade, are some that got going much sooner and are nearing at least a temporary saturation point.

Houston has definitely slowed down in the past two years. Between 1945 and 1953 the city added more than 1.5-million sq. ft. of office space, following the lean 1930s and an even leaner World War II period. This year only one new office building of any importance was finished—the 24-story Bank of the Southwest building. There's little in prospect for downtown—and some older buildings have come down—though some activity is brewing in the suburbs.

Atlanta followed a similar pattern—though a bit later. It has just added another 1-million sq. ft., mostly in three buildings, and real estate men think that will do for a year or so at least. Some older buildings aren't doing so well.

Most Philadelphians think they are getting near the saturation point, too. Penn Center started things off. Now only a handful of buildings are going up, with four more planned.

Boston is a special case—it hasn't had an office building boom in 30 years, and doesn't expect one. Only three major buildings have gone up—one before the war, two right after. Some think that if the high real estate tax burden were lightened, Boston might find itself in a massive boom.



Soviet university students and . . .



. . . workers, long silent, are forcing . . .

Kremlin to Mend Fences at Home

In Moscow early this week, the Central Committee of the Communist Party ordered a major revision of the current Five-Year Plan, including a cut-back in capital investment. A day later the Council of Ministers put a new man, Mikhail G. Pervukhin, in charge of economic affairs. It made him what an American might call the industrial czar of Russia. Pervukhin, with a different background on czars, describes himself as a Soviet General Electric chairman.

Together, these two moves amount almost to a declaration of an economic emergency in the Soviet Union. They may even be a prelude to a radical shift in the Kremlin power balance—one that would push party boss Nikita Khrushchev from the top rung of the political ladder. There's some speculation in Western Europe that Moscow faces such tough economic problems at home that it will be willing to come to terms with the West in Central Europe.

• **Causes**—Behind the present economic emergency lie these three things:

- The costly impact of the East European revolutions on the economy.

- The overly ambitious goals of the sixth Five-Year Plan and the failure to meet several key 1956 targets, including that for coal.

- Widespread unrest among Soviet workers and students (pictures), who are now protesting openly against low living standards and the Kremlin's policy in Hungary.

I. Facing Hard Facts

Russia's new industrial boss clearly has taken on a tough job. It is to trim the Soviet coat to fit the cloth at hand.

In effect, the Central Committee has admitted that Soviet resources are inadequate to meet all the plans made early in 1956 at the 20th Communist Congress.

- **Over Ambitious**—The capital investment targets for the period 1956-1960 give you some idea of just how ambitious Soviet planners were at that time. These called for considerably higher rates of investment than those reached during the years 1951-56—for the investment of about 31% of gross national product as against 25% in the earlier period. By contrast, personal consumption was to increase at only 4% a year, whereas it had increased 5% a year during the fifth plan.

At midweek, there still was no definite indication from Moscow about the extent of the investment cutbacks or where they would be made. But it seems likely that the ax will fall hardest on the vast schemes for industrial development in Siberia. These are the ones that will take longest to bring a payoff either in civilian or military output.

II. More Authority

In handling the present economic emergency, Pervukhin has authority that no Soviet planner has ever had. His predecessor, Maxim Saburov—chief planner from 1949 until this week—was more of a planning economist than a production chief.

What's more, Saburov had to get the approval of the top party brass for any major economic decision. Pervukhin apparently has been given full authority to take the necessary means to bring Soviet economic targets into bal-

ance with Soviet economic resources.

- **Well-Trained**—Pervukhin also has two other advantages:

- He is a highly trained engineer, with advanced degrees in both chemical and electrical engineering. He has spent his whole career in industry. It was about a year ago, after he had become one of the Presidium's top authorities in industry, that he spoke of himself as a Soviet counterpart of the chairman of General Electric. He seems to typify the new generation of Soviet leaders, who apparently are more interested in working for the advance of Soviet industry than the spread of doctrinaire Communism.

- The Council of Ministers has given him six top-level assistants—five of whom have held the post of Deputy Soviet Premier.

With this kind of setup, Pervukhin can be expected to shape Soviet economic planning with a firmer hand than anyone has used since Stalin's death.

III. Behind the Shakeup

The reason for the shakeup, according to the Central Committee, is poor economic planning. And Saburov obviously is paying the penalty. But there's far more to the story than this. It is now clear that history has destroyed some of the key assumptions that were made a year ago in drawing up the sixth Five-Year Plan.

- **Mistakes**—In the world at large, the Khrushchev-Bulganin regime envisioned a long period of declining international tension and a gradual shift of the world power balance in favor of Communism. This meant that they could consider the reduction of Soviet

armed forces and the release of manpower and other resources to capital investment.

Now, after what's happened in Eastern Europe, they can't count on "peaceful coexistence." They must consider whether scarce manpower needs to be kept in the armed forces.

Eastern Europe, a year ago, constituted a sizable economic asset, which returned huge profits to Moscow. Poland and Hungary, along with the others, were expected to contribute heavily to Soviet growth under the sixth plan.

Now the economic union between the U.S.S.R. and Eastern Europe has disintegrated. Both Poland and Hungary have become economic liabilities, which require substantial contributions from Soviet resources to keep going at all.

• **At Home**—Inside Russia, another basic assumption has gone by the board—the idea that a fast increase in productivity would provide the greater part of the surplus needed for new investment. This is proving an illusion in four key industries: coal, timber, cement, and steel. And behind the lagging productivity in these industries, according to the Central Committee, lie miserable housing conditions.

From all accounts, a big boost in housing construction will be near the top of Pervukhin's agenda. Apparently

he will give a lot more attention to this than to the increase of consumer goods production.

There is also a basic political assumption of the present regime, especially of Khrushchev's, that has backfired in the past year. When he made his secret speech to the Communist Congress last February, Khrushchev clearly believed that his de-Stalinization program would keep the Russian people—both workers and students—satisfied with their present lot. But well-authenticated stories coming out of Russia in the past two months indicate that Khrushchev calculated badly.

• **Speaking Up**—A series of sitdown strikes has occurred in various parts of Western Russia, several in Moscow itself. Workers have complained about basic wage rates and, reportedly, have won concessions.

At many universities, including the huge University of Moscow, students are getting politically out of hand. At the one extreme, they are giving the lie to Soviet propaganda about Hungary, talking back to top Soviet leaders. At the other, they are demanding some form of student self-government.

Add the fact that the workers, too, are showing disrespect to members of the Presidium who visit industrial plants, and you can see that the Kremlin is threatened with a real erosion of Communist authority.

Power Play

Reynolds Metals' plans for \$88-million plant in up-state New York are snagged in a tangle of legal meanings.

Eighteen months careful planning for expansion by Reynolds Metals Co. was put in jeopardy late last week when hot opposition blew up against a plan of the Power Authority of the State of New York to sell Reynolds a one-third share of power produced at the St. Lawrence hydroelectric project.

Reynolds wants the power, under a 33-year contract, to run an \$88-million aluminum reduction plant that it plans to set up at Rooseveltown, N. Y., close to the Barnhart Island powerhouse (BW—Dec. 1 '56, p. 64). There, Reynolds would turn out 200-million lb. of aluminum ingots a year, starting production in mid-1959.

Since early 1955, Reynolds has been negotiating with PASNY for an allocation of power for this projected plant. Grumbling among opponents started as news of the talks began filtering out. The big blow-up came last week when PASNY recommended that Reynolds and Aluminum Co. of America each get 239,000 kw. of the 820,000 kw. to be produced at Barnhart Island.

• **Chief Target**—"It's a give-away . . . it's worse than Dixon-Yates," the opponents hollered. They aren't so much incensed at the Alcoa allocation; that power merely replaces electricity Alcoa has long generated at a hydro station that will be cut off from the flow of the river once the St. Lawrence seaway and power project is completed. The opponents, rural electric cooperatives, municipal power officials, and five major unions, have made their prime target the allocation to Reynolds. They believe most of the 239,000 kw. should be available to rural consumers, and they have called on New York's Gov. Averell Harriman to veto the power authority's move.

Now it's a question of how Harriman interprets the law. New York's Power Authority Act says: "such [hydro-electric] projects shall be considered primarily as for the benefit of the people of the states as a whole and particularly the domestic and rural consumers to whom power can economically be made available . . . use by industry shall be a secondary purpose. . . ."

• **Linked Plans**—But, says the power authority, "You have to fit the situation to the words." And the situation, as PASNY sees it, involves not one but two hydro power projects. It's seeking to link the St. Lawrence development

A Blanket "No" on Fast Write-Offs

ODM boss rejects all pending applications for production expansions—including scarce steels.

Washington this week rejected all pending applications for new fast tax write-offs for production capacity expansion—including structural, plate, and tubular steel.

Director Arthur S. Flemming of the Office of Defense Mobilization, said he reached the decision after advice from the full Defense Mobilization Board—made up of most of the Cabinet officers including Treasury Secy. George M. Humphrey, long an opponent of new fast amortization grants.

• **Open Goals**—Expansion goals are still open in 22 of the original 228 items eligible for wartime tax aid incentive, but industry efforts to reopen goals for scarce steel are now at a dead end.

The only consideration for new tax write-offs, Flemming said, would be if a case could be clearly made that in a full mobilization—and only then—there would be a scarcity of materials for military, atomic energy, defense-supporting, or "rock-bottom" civilian requirements. He said that this is not now the case in any of the \$2.3-billion

worth of pending steel applications, \$1.3-billion worth of pending commercial aircraft applications. (These two categories comprise the bulk of tax write-off applications now before ODM.)

• **Allocations**—Flemming also announced that no limited-priority allocations for steel on a defense-supporting basis will be granted. The so-called controlled materials system now in effect for military and atomic energy defense rated orders will not be broadened to include steel for tankers or anything else now short because of current market conditions.

Flemming said both decisions affirmed once more a policy in existence for a year or more.

Flemming said his final decision was based partly on a report from Deputy Secy. of Defense Reuben Robertson that defense requirements of materials for wartime mobilization are being revised as a result of "new concepts"—weapon improvements and technological advances.

with the long-planned 1.8-million kw. Niagara hydroelectric project.

That project must be approved by Congress and licensed by the Federal Power Commission. The 84th Congress failed to approve it. But opposition has shrunk and now PASNY believes it will get its license and will start work at Niagara next year.

Together, the two projects will almost double the power available in upstate New York. But St. Lawrence power alone will have only a small effect, economically, if most of it is sold to domestic and rural consumers. For one thing, more than 100,000 kw. of the St. Lawrence output is interruptible power. It cannot be sent to those consumers, is of use only to industry.

PASNY has assured the rural co-operatives, municipal utilities, and other consumers that they'll get all the power they need until 1965 through allocations of 115,000 kw. to Niagara-Mohawk and 70,000 kw. to the co-operatives and municipalities. Beyond 1965, says PASNY, there'll be that extra 1.8-million kw. available from Niagara.

That's why the Reynolds proposals to bring in industry look so good to PASNY.

• **Seaway to Market**—The project looks good to Reynolds, too. At the start, it will pay about 3.8 mills a kw., but after 1985, when PASNY's bonds are retired, power production costs will drop, and Reynolds will get some of the benefit.

Reynolds intends its new plant's production to be used primarily for auto parts. The St. Lawrence Seaway, near the plant site, supplies a cheap direct transport line to Detroit. Reynolds would employ some 1,200 people in its plant. Aluminum fabricators may also move into the area pushing employment close to 5,000.

• **Question of Law**—With the promise of all this capital moving into a long-depressed area, what are the opponents complaining about? Says Milford van Riper, secretary of New York's Municipal Electric Utilities Assn., "We only want to see the law upheld. Plainly, it isn't the intent of the law to make such large allocations to industry."

Next step in deciding the fate of Reynolds' plans is for PASNY to send its recommended allocations to Harriman. Within 60 days he may approve them, veto them, or call a public hearing before he decides the issue.

About the only clue to the outcome is this: In making their recommendations, PASNY's five trustees split 3-2—and the two who voted against Reynolds' allocation are Harriman's appointees.

Meantime, in Washington, the Federal Power Commission is involved, too. It has scheduled hearings Jan. 28 to consider whether Massachusetts and New Hampshire should get allocations.

Cost of Living: What's Happening to It

	Total Cost of Living	1947-49 = 100			
		Food	Clothing	Housing	
				Total	Rent Only
November, 1949	101.6	99.4	97.4	103.9	106.6
November, 1950	105.5	104.4	101.6	108.8	110.0
November, 1951	112.8	114.6	108.5	113.7	115.4
November, 1952	114.3	115.0	105.2	115.7	119.5
November, 1953	115.0	112.0	105.5	118.9	127.3
November, 1954	114.6	111.1	104.6	119.5	129.2
November, 1955	115.0	109.8	104.7	120.9	130.9
December	114.7	109.5	104.7	120.8	131.1
January, 1956	114.6	109.2	104.1	120.6	131.4
February	114.6	108.8	104.6	120.7	131.5
March	114.7	109.0	104.8	120.7	131.6
April	114.9	109.6	104.8	120.8	131.7
May	115.4	110.0	104.8	120.9	132.2
June	116.2	113.2	104.8	121.4	132.5
July	117.0	114.8	105.3	121.8	133.2
August	116.8	113.1	105.5	122.2	133.2
September	117.1	113.1	106.5	122.5	133.4
October	117.7	113.1	106.8	122.8	133.4
Nov., 1956	117.8	112.9	107.0	123.0	133.8

Data: Dept. of Labor, Bureau of Labor Statistics.

©BUSINESS WEEK

Steel Gets Another Nudge

Despite a decline in food costs, consumer prices nudged up slightly in mid-November, to a new record high of 117.8% of average 1947-49 costs.

The higher index figure meant a 3¢-an-hour pay increase for more than a million workers in the steel, aluminum, and other industries with steel-type labor contracts. It also assured a new upward pressure on wages in 1957 (page 67) and, consequently, new pressure on steel and other prices.

• **Steel Edges Up**—Even without a general steel price increase, which could hardly be enforced without U.S. Steel's now-withheld blessing, the cost of steel is already going up around the fringes. For example:

• **Colorado Fuel & Iron Corp.** boosted plate prices by \$7. This is not an unusual move by a non-integrated producer, especially when demand is heavy and the prices of scrap, on which it must depend, are high. But it may encourage more producers to make similarly hefty increases.

• **Allegheny Ludlum Steel Corp.** raised base prices on stainless steel and, significantly, U.S. Steel went along with the move.

• **Armco Steel Corp.** kicked off a flurry in extras on hot and cold sheet, two of the most basic products. Companies with much of the industry's sheet capacity followed. Again U.S. Steel went along.

People in the trade look for more such price-boosting, especially with the

new 3¢-an-hour wage increase. The c-of-l clause adds around \$1.80 a ton to steel producing costs. And all but the very biggest producers regarded prices as inadequate last summer.

• **Some Drop**—Food was the only major item in the monthly c-of-l index that declined. Rents and house furnishings were higher. Fuel prices rose sharply. Entertainment and professional services—including medical services—cost more, too.

However, BLS Commissioner Ewan Clague revised earlier predictions of higher costs running into 1957. He said a "slight" downturn should show up in the December index and possibly those for January and February. Lower food and clothing costs and further discounting of prices on 1957 automobiles are expected to pull down the general index.

Clague noted that this year discounts on new cars showed up more extensively, and came earlier, than in the 1956 model year. He commented that "maybe the discount price is becoming the more normal price."

• **Better Off**—Although living costs now stand at a record high level, factory workers' buying power is up even more, according to BLS. Average net spendable earnings rose 17¢ an hour in November, to \$75.20 for the worker with three dependents. BLS estimates that the factory worker can now buy about 1% more goods and services than a year ago.

Big Investors ...

... are much like the crowd, Congress study says, except for their passion for top blue chips.

Institutional investors aren't quite the Olympian operators they seem to many—in fact, they act much more like the rest of the market than most people think, getting out when the market slackens and often jumping in like anybody else when it's on the rise.

So their stabilizing influence isn't so great as most of those on the sidelines have figured it to be. But the effect they do have is magnified by being concentrated on a comparatively few blue-chip stocks; and by their trading in these stocks, the institutional investors do add a buoying influence and exert a significant impact on the market.

These are the conclusions of a lengthy study of the performance of institutional investors, made by the staff of the Senate Banking Committee under the direction of Dr. Asher Achinstein, economist on loan from the legislative reference service of the Library of Congress.

• **Outgrowth**—The study grew out of the stock market inquiry in March, 1955, under Sen. J. William Fulbright.

The Banking Committee decided that it would require a full-fledged fact-finding probe to reconcile the conflicting views about institutional investors that came out in the hearings.

• **Scope**—The staff study, made in cooperation with other government and private agencies, examined market activities of seven types of institutional investors, including not only the principal types but the major investors in the field. The 210 institutional investors covered break down into 20 open-end investment companies, five closed-end investment companies, 25 life insurance companies, 30 corporate pension funds, 30 bank-administered common trust funds, 60 casualty companies, and 40 fire insurance companies.

The period covered—from January, 1953, to October, 1955—was one primarily of an ascending market, beginning in October, 1953, and ending just after Pres. Eisenhower's heart attack. But there were cases of stocks adversely affected by some special cause, and these gave a chance to study tactics in a downturn.

• **Sample**—Achinstein collected data on total common stock holdings of the groups on Jan. 1, 1953, and Oct. 31, 1955, in terms of shares and market value. He also got figures on total month-by-month purchases and sales

by the seven groups in a list of 25 selected blue-chip stocks, and the ups and downs of these 25 stocks on the market in this time.

Achinstein selected the 25 stocks, out of some 1,100 listed on the New York Stock Exchange, on this basis: (1) they must be actively traded issues; (2) they must be favorites in the portfolios of investment institutions; and (3) the list should give a fair degree of representation of various industries.

• **Traits**—Over-all, the seven groups moved along with the market boom, increasing common stock holdings from \$6.2-billion on Jan. 1, 1953, to \$11.5-billion on Oct. 31, 1955. Most active was the corporate pension fund group, which increased holdings 158%.

Contrary to the common view that institutional investors, because of a long-term outlook, are seldom sellers of stock, the study showed that all seven groups sold substantially throughout the period.

The study turned up a little evidence that institutional investors got ahead of the pack on the rise: Only one group, the life insurance group, seems to have started buying before the October, 1953, rise—and only by a month.

Open-end investment companies showed a downtrend in net purchases in 1953, but bought heavily in the first quarter and fourth quarter of 1954 and first-quarter 1955. Closed-end investment companies were net sellers in 27 of the 34 months. Corporate pension funds showed less fluctuations in net purchases than any other group. Fire insurance companies did not follow the crowd on the rise, and wound up net sellers in 1955.

• **Case Histories**—Achinstein and his group took a long, hard look at what happened to the 25 blue chips picked as institutional favorites. Heading the list of these both for open-enders and life insurance companies was General Motors. Sears, Roebuck led in the corporate pension fund group—but that was only because the Sears pension fund was buying it so heavily.

Trading in Reynolds Tobacco Co. gave an insight to what happens in an adverse market. Reynolds went counter to the early-1953 slide by moving up from \$42 a share in January to a \$51 average in September. But with the lung cancer scare that November, institutional trading shifted, and in 1954 all of the institutionals became net sellers. By July, Reynolds was down to \$36, its low for the 34-month period.

Even when an industry's outlook was rosy, institutionals sometimes didn't buy. E. I. du Pont de Nemours led the rise in chemicals during the period, but the report said institutionals showed little interest in it—perhaps scared off, the report speculated, by its soaring quotations.

• **Market Share**—At the 1955 hearings, spokesmen for some institutional investors said institutional buying represented only about 6.5% of the volume of the New York Stock exchange. Achinstein concludes that a more accurate figure would be 16%. But, he says, the real significance of the institutional investor is in the concentration on a limited list of stocks that tend to be in the forefront of market activity and of the upward swing in prices.

Liquid Funds ...

... show the pinch of tight money even though corporate working capital generally rises.

The pinch for ready cash that has kept corporation treasurers fidgety the past couple of years is getting a little sharper.

The latest Securities & Exchange Commission survey of corporation working capital shows cash and U.S. securities held by corporations Sept. 30 to be higher than the quarter before by only \$400-million. And in the same three-month period, current liabilities rose \$5.5-billion. Liquidity—which can be measured roughly by the ratio of cash and government securities to current liabilities—therefore declined.

Liquidity has been declining since early 1955, and is now at levels that were current in the early 1940s. On Sept. 30, corporations had \$31.2-billion cash and \$18-billion in government securities compared to \$106.2-billion in current liabilities.

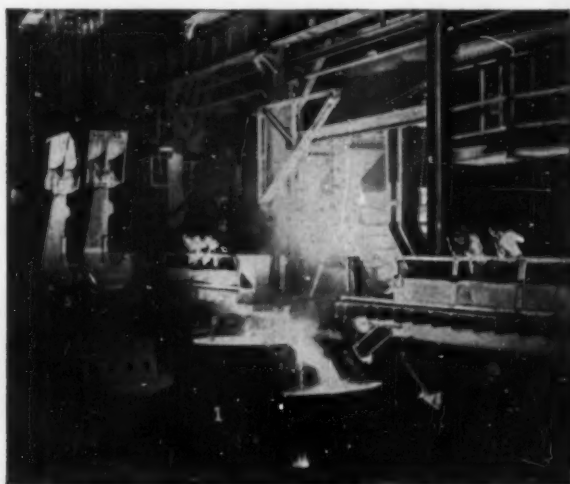
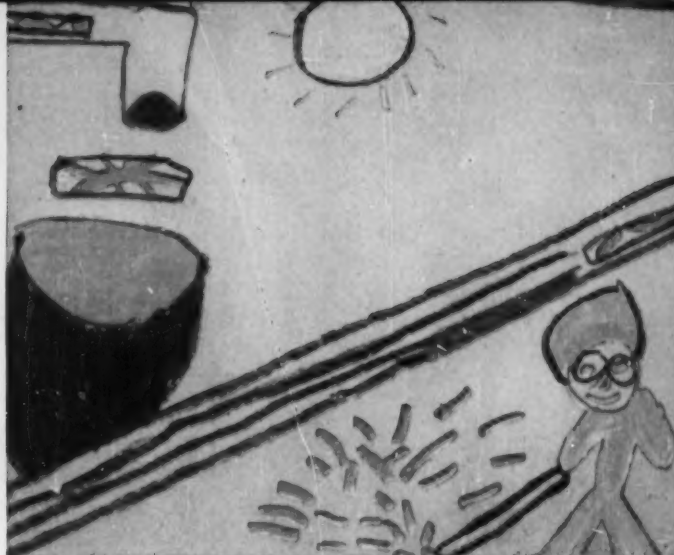
• **Gains**—On the other hand, net working capital—current assets less current liabilities—hit \$107.2-billion Sept. 30, the highest ever. This was a rise of \$800-million in three months. The gain in net working capital was due in large part to a jump of \$3.7-billion in trade notes and accounts receivable. These usually show a rise in the Sept. 30 survey due to Christmas merchandise shipped but not paid for; this year the increase was unusually large.

The largest gain among current liabilities was a \$2-billion jump in federal income tax liabilities, reflecting the lower payments made by corporations in the last two quarters.

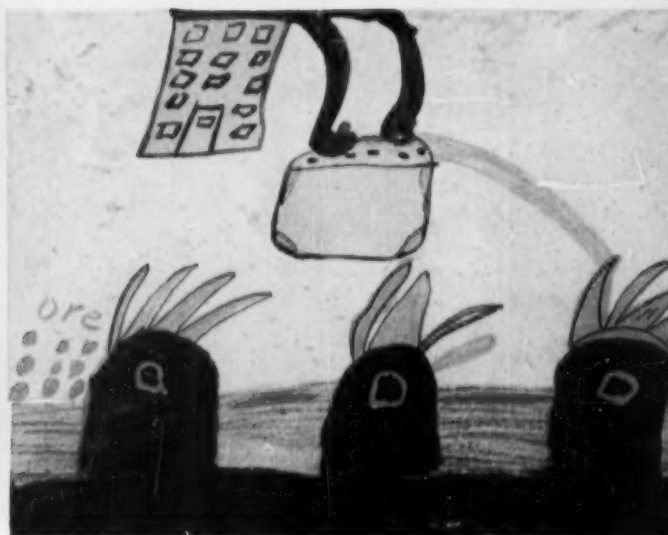
• **Added Up**—The survey shows that corporations invested \$7.7-billion in plant and equipment during the third quarter in addition to the \$800-million gain they made in net working capital. Accounting for these sums, \$5.9-billion came from retained earnings and depreciation accruals. The balance was provided by \$2.1-billion worth of long-term borrowings and about \$500-million worth of net new stock offerings.



BLAST FURNACE at Colorado Fuel (above) looks like this (right) to David Montelongo.



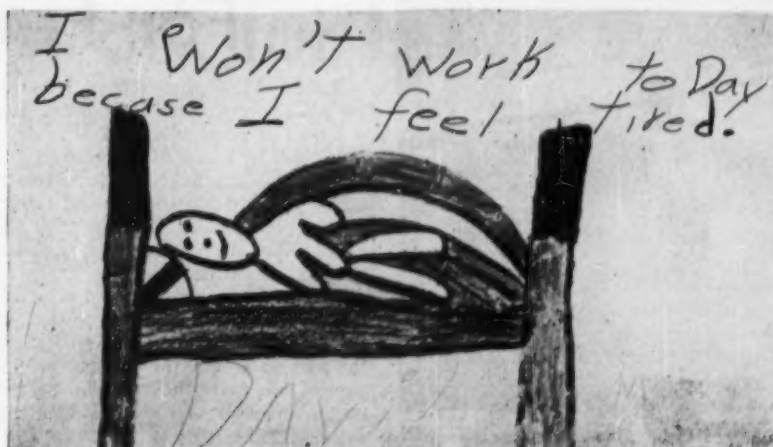
OPEN HEARTH undergoes alterations (right) under the hand of third-grade Joanne Filler.



Moppets' View of a Steel Mill

A trip through a steel mill—where daddy works—inspired the muse at Minnequa School in Pueblo, Colo. After a tour of Colorado Fuel & Iron Corp.'s nearby plant, pupils of the third grade, crayons clutched tightly in their sticky little paws, recorded their impressions of how big industry operates.

Colorado Fuel saw the drawings, and was so intrigued that it published them in its employee publication. The tour was an outgrowth of a Pueblo elementary school project in which Minnequa School students study various occupations and types of work. In addition to guided tours of the mill, Colorado Fuel supplies the pupils with material for themes and sends out samples of ores used to make iron—a sort of do-it-yourself steelmaking kit.



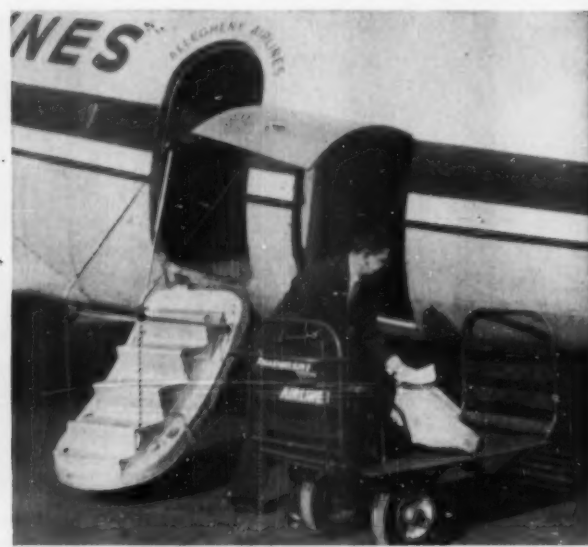
YOUNG ARTIST who squealed on father tactfully hedges on his signature.



MANAGER Robert McKenzie of Allegheny Airlines' station at Bradford, Pa., is a man with many jobs.



WEATHERMAN McKenzie keeps track of readings on the airport's weather gauges.



PORTER McKenzie loads baggage and mail into an Allegheny DC-3 that's ready for next hop.



ALL THIS for a lone passenger, whose solitude shows why stations like Bradford can't afford big ground staffs.

For Feeder Airlines

Robert McKenzie, station manager for Allegheny Airlines at Bradford, Pa., is a man of many functions.

He may be found helping out in selling tickets, handling baggage, advising pilots on local air and ground traffic, making reservations, holding the fire extinguisher at engine start-up, or even gauging the weather.

These things must be done at all commercial airports, big or little. At little ones like Bradford, though, where the income is less, the number of employees has to be held down. So the station manager must lend a hand on a lot of tasks.

• **Profitless Toil**—In a way, this situation is characteristic of the entire local

service airline industry. It is filled with young management men who are working hard at a wide variety of jobs—many of which don't fall in the management category.

Despite this, the local airline industry can't make a profit on operations. All 13 lines need government help in the form of subsidy beyond mail pay. In 1955, these subsidies ranged from a low of 14% of total revenues in one case to a high of 67%.

None of the 13 has ever paid a cash dividend on its common stock, yet none has been able to build up a large financial reserve to meet the impending and essential re-equipment program. It is generally agreed these carriers cannot



GROUND CREW McKenzie stands by with a fire extinguisher, while engines are started.



TICKET AGENT McKenzie also has to help out at the airport ticket counter.



OPERATIONS CHIEF McKenzie scans sky and field, radios the go-ahead to the pilot.

It's a Lot of Work for Low Pay

make a profit with most of their present equipment. Yet, they'll have trouble financing new equipment unless they can show a profit.

• **Treadmill**—The government doesn't want to go on paying subsidies to these airlines forever. At the same time it can't let them go out of existence. Too many communities, industries, and people have come to depend on them.

I. Vital Statistics

So the questions arise: For all the hard work that goes into them, what good does it do? Where are they going from here? And how do they propose to get there?

The local service airlines are scheduled carriers that have come into existence since World War II. They are Allegheny, Bonanza, Central, Frontier, Lake Central, Mohawk, North Central, Ozark, Piedmont, Southern, Southwest, Trans Texas, and West Coast.

Except for the Western Plains states, New England, and Florida, these airlines pretty well blanket the country. They serve 500 communities, of which about 270 receive their only air service from a local carrier.

The average hop of a local line is about 77 miles, and the average passenger journey is about 182 miles. In other words, these carriers are trying to do business in that phase of the air-

line industry where business is hardest to do. Less than 2% of all common-carrier passengers fly on journeys of under 250 miles.

• **Small Potatoes**—In the first nine months of 1956, according to the Air Transport Assn., all the local airlines together carried 2,583,000 passengers, an increase of 19.6% over the first nine months of 1955. By comparison, American Airlines, biggest of the domestic trunk lines, flew 5,856,721 passengers in the same period.

Through September, total revenues of local lines, including subsidies, amounted to \$49,187,000—an increase of 16.8% over the 1955 period. Nevertheless, the industry suffered a net loss



COMING IN for a landing at Wilkes Barre-Scranton, Allegheny pilot lines up runway.

of \$410,000, compared with a net profit of \$184,000 last year. Operating expenses have gone up 20% in the year.

II. Community Interest

While the local service lines appear to be running ever faster without managing even to stand in the same place, they do a great deal for the economies of the many communities they serve. Take Bradford, for example. Located in the hills of northwestern Pennsylvania, it has a population of 17,000 that would be almost cut off were it not for the 20 flights a day provided by Allegheny Airlines. It has no direct rail passenger service and only infrequent buses.

- **Industrial Value**—Bradford is the headquarters of Zippo Mfg. Co., maker of cigarette lighters. Since Allegheny started serving the town, Zippo has been able to extend its Christmas business about two weeks later than with surface shipments. During the first part of December, much of the production now goes by air.

- **Dresser Mfg. Div. of Dresser Industries** is the town's biggest employer, with a payroll of 1,300 employees. Says a company official: "Because we depend on it for 80% to 90% of our transportation, we'd be lost without Allegheny."

- **And a spokesman for the new local Corning Glass plant, engaged in electronic component work, declares, "I don't think we would have moved into an area that didn't have commercial airline facilities."**

III. Handicaps

In spite of the important part the local service airlines play in the transportation industry and the increasing number of passengers they haul, they continue to lose money largely because

of obsolete planes, uneconomic routes, and archaic schedules.

- **Cramped Workhorse**—All but three lines—Allegheny, Mohawk, and Southwest—use DC-3s exclusively. Though this plane was once the chief money-maker of the airlines, it's far from that now. While fares have held relatively steady over the years, the wages of everyone connected with operating and maintaining the plane have soared.

- **Since it's impossible to cram any more passengers into a DC-3, the plane can now earn less money even at the best of times. Right now, the profit for most lines comes only in filling the last four or five seats of a 24-passenger plane. For local service carriers to fill those last seats is next to impossible. Because the airlines must schedule frequent stops, it's often necessary to leave seats empty for stations down the line.**

- **Too Slow**—If the first problem with the DC-3 is that it's too small, the second is that it's too slow. The cruising speed of a "3" is about 170 mph. But when this plane is used in local service work, a lot of time is spent on aprons, runways, climbing, and letting down. The passenger's elapsed time on a flight turns out to be much longer than the listed cruising speed would indicate.

- **In other words, local service airlines are losing the chief advantage of the airplane—speed.**

- **Showing Its Age**—The third problem with the DC-3 is that it's too old. Douglas Aircraft Co. has long since stopped making these planes or, more important, spare parts for them. This means airlines still flying these 20-year-old craft have to make parts themselves, have them custom-made elsewhere, or scavenge them from other DC-3s.

- **This can take weeks, while the plane isn't earning any money. And the part that's needed will cost far more than it used to.**

- **No Choice Routes**—Another reason

why local airlines can't make a profit is their route structure.

The thinking behind the locals when they were first certificated by the Civil Aeronautics Board was that they would feed traffic to the major trunklines.

Under this concept, routes originally radiated from a central point to smaller communities. On inbound flights a plane would start practically empty, would fill up as it neared the trunkline city. On the outbound trip, it would gradually drop its load.

Then as now, the average load factor over the whole distance of such a flight was well below what it takes to make a profit.

In time, the locals sought and received extensions to more logical points for two-directional traffic. They were also awarded additional routes crisscrossing the old lines. These were to serve the surprising number of people who wished simply to go from one point to another within the local system.

- **Want Longer Hauls**—As the local service carriers expanded in this fashion, they began to serve more and more of the smaller cities on trunkline routes. It is the contention of most local operators that the trunks skim off the cream of the business from these cities. This leaves the locals, who provide more flights but on slower schedules, unable to make a profit on the routes.

- **Certain costs in airline operations are fixed. It costs about the same, for example, to sell a passenger a ticket or handle his baggage whether he's going on a trip of 200 miles or 2,000 miles. But the return on the first passenger is only one-tenth that of the second. Local carriers insist that to make a profit they need longer routes.**

- **And Express Flights**—Another major reason for losses, locals claim, is the schedules to which they must adhere. Being set up as feeders, they were originally obliged to make every stop on every flight. This quickly proved disastrous, since a smaller city was unable to generate the same traffic as a larger one.

- **Bit by bit, the CAB has allowed the locals "skip-stop" privileges, provided each town gets a certain amount of service. The local carriers insist they should be allowed to skip many more stops on many more flights. If they could, they might then sell the whole plane instead of holding seats for stations down the line. Faster express flights between major points, they claim, could generate more traffic and cut costs.**

IV. Costly Solutions

If the major problems are depressingly clear to the locals, so are the solutions. What's needed are bigger, faster planes, longer routes to more

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big cities, and fewer required stops along the way. This pattern is just as clear and depressing to the trunks, for the big lines have a stake in it.

The original concept of feeder lines has largely disappeared. In its place, if the locals have their way, will grow an industry of regional trunklines. Obviously, a reasonable compromise must be worked out over the years to come.

- **Shuffle**—In some cases, the major trunks would be willing to yield some of their less busy points to the regional lines—if they weren't convinced that by so doing they would be building up the smaller lines to the point where they would be real competition on major runs. Besides, lots of cities like the prestige of being on the "main line" and don't want to lose their trunkline even though it may provide only token service.

If many of the new route applications to CAB were approved, locals would not only invade the territory of the trunks but also invade each other. And the board believes that if locals are unable to compete without subsidy against trains, buses, and most particularly the private automobile, they are hardly strong enough to face competition from each other.

- **New Plane**—In the matter of a DC-3 replacement, at least one is finally on the way. It's a two-engine turboprop designed jointly by Fokker Aircraft Co. in Europe and Fairchild Engine & Airplane Co. here. The new plane, the F-27 Friendship, will have a cruising speed of 250 mph., a range of 2,225 miles, will seat 40 passengers, and will be able to land and take off at most smaller airports. It should also be economical to fly and maintain.

The chief difficulty, however, is its price tag of \$600,000, with radio and extras. A re-equipment program based on airplanes costing such prices is not something that local service airlines, with their current financial state and uncertain future, can dive into lightly.

- **Financing**—For the privately held lines, it may mean selling stock to the public; for those already publicly held, it may mean a major dilution of equity. For either, selling stock will not be easy, nor will borrowing money. Local service management is just about unanimous in thinking that the government must help finance new planes.

Not all airlines are satisfied the F-27 is the final answer. So far, however, Frontier has ordered two and taken an option on four more. West Coast has ordered four and optioned four. Bonanza has ordered three and optioned three, and Piedmont—completely sold on the plane—has ordered 12 and optioned 12. The first F-27 should be delivered next fall.

- **Chance to Talk**—For the future,

there are two rays of hope. Last week, CAB decided to investigate the local airline situation to determine whether or not there should be a new policy on earnings. This will give the industry a chance to present its case, particu-

larly its equipment-financing needs.

And for the longer term, the industry hopes that when the major trunks begin flying their huge jets, they will be willing to turn the intra-regional business over to the locals.

Patent Laws Are Up for Review

And Vannevar Bush urges some changes on the Senate. More reports are coming and hearings are scheduled to be held next year.

It is now certain that this country's patent laws and their administration by the U.S. Patent Office and the courts will come under scrutiny in the new Congress.

This week, the congressmen who are taking on this task got some advice from Dr. Vannevar Bush on how to improve the present system.

Bush's 30-page report is the first of nearly a score of reports being prepared by outside experts for the Senate Judiciary Subcommittee on Patents, Trademarks, and Copyrights.

- **Hearings Planned**—The subcommittee, headed by Sen. Joseph C. O'Mahoney (D-Wyo.) has been gearing up since early 1955 for a massive attack on what Bush and others call an "archaic" patent system. O'Mahoney will use the reports in hearings to be held next year aimed at drafting legislation to bring the patent laws into line with today's needs.

- **Recommendations**—Bush feels that "recent tendencies" have largely undermined confidence in the patent system. But he is as impatient with those who would do away with the entire structure as he is with others who have been inclined to leave the rust untouched. Bush suggests a number of specific measures to simplify the complex patent law and practice and adapt it to the needs of the inventor, business, and consumers:

- **More funds** should be set aside to give the Patent Office the trained manpower and mechanized equipment it needs to search the 7-million reference documents used to check the novelty of ideas submitted for patent. Mechanized equipment could be used to handle published technical and trade journal literature as well as previous patents, Bush says—and use of computers would lessen the possibility that already issued patents would be overthrown on the basis of previously unnoticed publications.

- **The Patent Office**—before taking final action on a patent application—should provide a period for possible objections, for the presentation of overlooked facts bearing on validity of the proposed patent. This would require

a published description of the invention in general terms before the patent is granted.

- **Congress** should establish more specific and restrictive criteria for determining whether an invention is patentable. It should limit applications to situations in which protection is needed to bring a useful invention into production.

- **Special administrative tribunals** should be established in the Dept. of Commerce to rule on the scientific facts in litigated patents, and the determinations of these hearing boards should be binding on the courts.

- **Compulsory licensing** at a reasonable royalty should be required—but only in cases in which (1) restrictive patent pools result in industry domination, (2) entry to an industry is denied through patent control perpetuated by improvement patents, (3) antitrust laws are violated, or (4) patents are unreasonably suppressed.

The antitrust laws, Bush contends, are a blunt bludgeon for dealing with "the subtleties of the problem of patent licensing."

Bush cites the automobile manufacturing industry as a case in point in discussing the drawbacks to open patent pools. The auto makers' "unduly soft type of patent handling," he says, is at least partly responsible for the industry's failure to "measure up to American ideals, on the score of radical technical advance, when compared to European attainments."

- **Future Reports**—The Bush report will be followed in the next few weeks by two others—a review of the patent system in terms of its function and operation in today's economy by George E. Frost, Chicago attorney, and an exhaustive statistical analysis by the Patent Office of ownership of patents issued since 1939. Frost's report—reflecting the dominant view of the patent bar—in general defends the present system. The Patent Office data, which includes an analysis of the patents issued to 176 large corporations, shows that corporations got 59% of all patents issued during the 16-year period covered.



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	180°F.	25.0	18.6	23.5
Flexural Modulus, $\text{PSI} \times 10^4$	Room Temp.	1.88	1.61	1.82
	180°F.	0.90	0.79	0.89
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In Business

Economic Signs Mostly Favorable As Business Goes Into New Year

Economic indicators were numerous as the year drew to a close with government and business sources in prophetic—or retrospective—moods.

The Commerce Dept., in the latest issue of its Survey of Current Business, reports most key areas of the economy are being spurred by strong demand. But it made the reservation that rising prices account for a large part of the gain in dollar volume of business. . . . The National Assn. of Purchasing Agents, noting a yearend decline in both production and new orders, said that most of its members expect 1957 to top 1956. But many of them have their fingers crossed on the international situation, the tightness of money, and a possible decline in building.

The Commerce Dept. reported that \$314.5-million was paid out in November dividends by corporations that issued public reports. That's 64% above the year-before month. . . . The Small Business Administration said that in November it O.K.'d 304 small business loans for a \$13,531,000 total. It was SBA's second largest month. . . . Insurance trade sources said that sales of ordinary life insurance for the first 11 months of 1956 were close to \$32-billion—more than for the whole of 1955.

On the production front, the National Machine Tool Builders Assn. said tool shipments and new orders were down a bit in November. But the trade expects record or near-record sales for 1957.

The winter wheat crop in 1957 will be the smallest since wartime 1943, the Agriculture Dept. predicts. The department believes that the effects of drought and the soil bank will hold the crop to under 625-million bu. That compares with nearly 735-million bu. this year and with a 1945-1954 average of close to 873.7-million bu.

Pitt Consol's Reported Mine Dicker Tops Corporate Mergers, Expansions

The nation's biggest producer of bituminous coal is reportedly dickering for a still stronger hold in the field of metallurgical coal. Well-informed sources say that Pittsburgh Consolidation Coal Co. wants to buy the Hutchinson mine, east of Pittsburgh, where Westmoreland Coal Co. has an annual capacity of 500,000 tons of steelmaking coal.

In the oil end of the fuel business, Atlas Corp. revealed that it will pay \$8-million in installments for the Eldorado Refining Co. of Kansas, which produces, refines, and markets petroleum products.

Physical expansions, too, were in the corporate cards. A record 1957 program of \$94-million in new construction is all set at Niagara Mohawk Power Corp. (compared with \$62-million spent this year).

Subsidiaries of three major oil companies—Sun Oil, Atlantic Refining, and Cities Service—plan to form jointly a new company to build a 100-mile pipeline from

Delaware Bay to the refinery center near Philadelphia. The new outfit, Cape Pipe Line Co., will invite other major refiners to join in the \$40-million-plus project.

Methyl methacrylate for plastics will be produced at an \$11-million plant to be built by Hawthorn Chemical Corp., which has been set up jointly by Hercules Powder Co. and Imperial Chemical Industries. The plant, with an annual capacity of 35-million lb., will be at Louisiana, Mo., next to a Hercules plant that turns out ammonia and methanol.

GM Reported About to Offer Anti-Spin Differential for 1957

That fancy looking differential—designed to get your car rolling even when one drive wheel is spinning helplessly on ice or in mud—is on the brink of conquering vast new automotive worlds.

Trade circles say, and say with conviction, that one of Detroit's Big Three—General Motors to be exact—will offer Dana Corp.'s Spicer Thornton Power-Lok as optional equipment on one of its major lines of 1957 cars. GM refuses to confirm it, and Dana says only that it has a Big Three order and is producing to meet it.

The Spicer differential was introduced last year and is optional on 1957 Studebakers, Lincolns, Continentals, Jeeps, and a few trucks. It adds between \$35 and \$50 to the price of a car—a sum whose importance might shrink in the eyes of a driver stuck on an icy hill.

The standard differential has the disadvantage that, when one wheel is spinning futilely, all the power goes to the useless wheel. With the Spicer differential, the power is promptly transferred to the other wheel. Of course, if both your rear wheels are on ice, you can give up the whole thing.

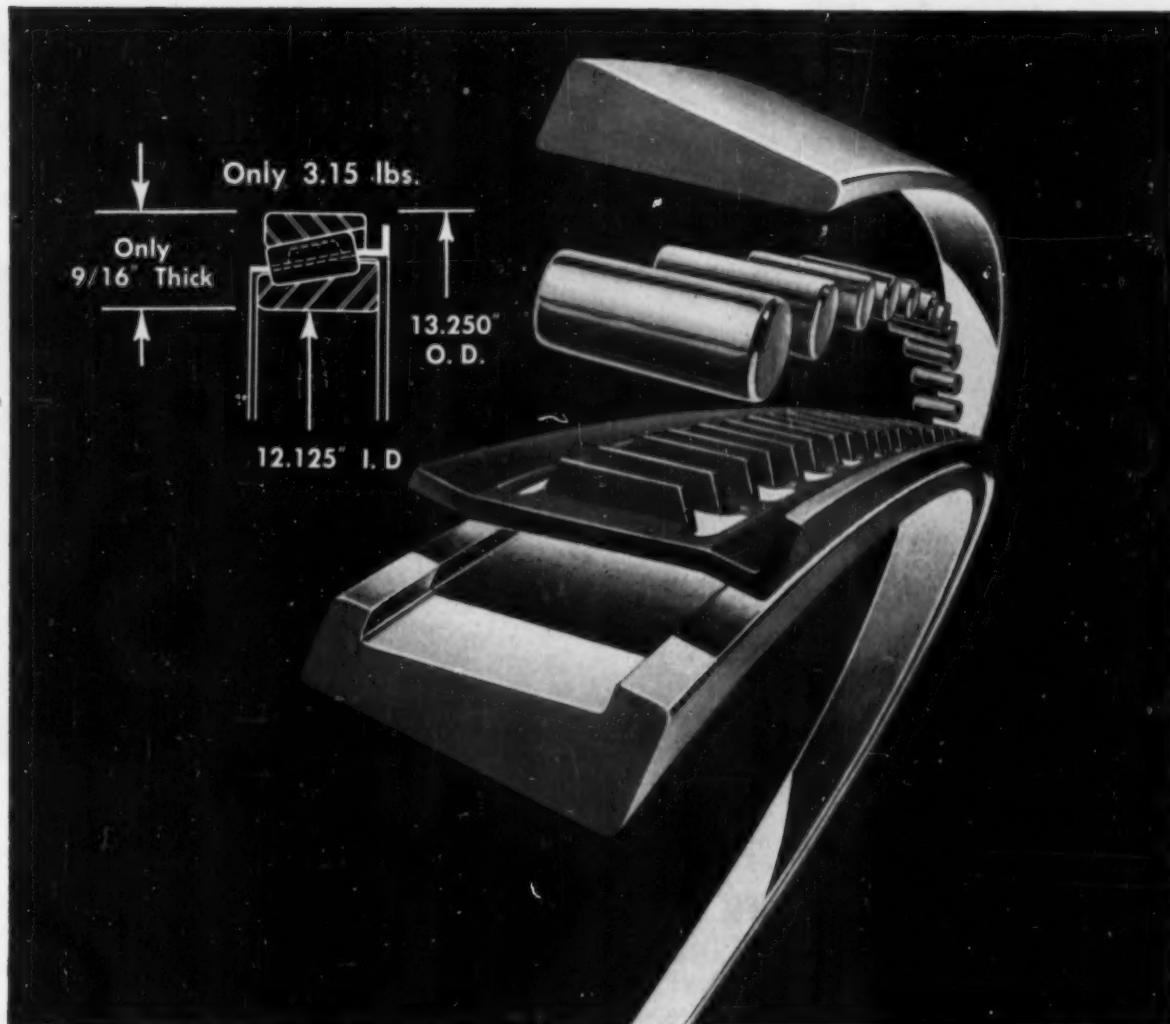
Tolls on Turnpike Fall Short, State Wants U.S. to Take Over Now

Hard-pressed Kentucky officials are looking wistfully to Washington for help in keeping their turnpike fiscally afloat. But there's no immediate prospect of their getting the help.

Here's the situation. In four months of collecting tolls, the 40-mile road from Louisville to Elizabethtown has not taken in enough money to meet the 3.40% coupons on its \$38.5-million bond issue. But the road is slated to be part of the free interstate highway network called for in the federal government's \$33-billion road program (BW—Jun. 30 '56, p. 29).

So, say the Kentucky officials, why shouldn't Uncle Sam pay off their bonds right now, and incorporate the stretch in the free system?

There's a big catch, though, to any quick action for hopeful Kentucky or any other state that might want to de-toll a turnpike and get rid of interest charges by using the same gimmick. The catch is that Congress has given the Bureau of Public Roads until 1958 to report back on the problem of reimbursing states for the depreciated value of their toll roads that meet interstate standards.



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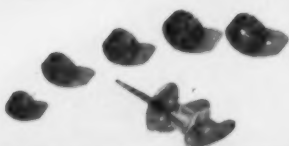
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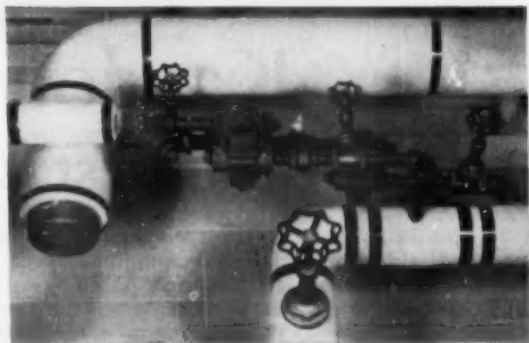
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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
DEC. 29, 1956



A quick preview of the new Congress, meeting Jan. 3:

Democrats will be in control—hold majorities in both Houses. In the House, the majority is 32 seats. In the Senate, the division will be 49-to-47, but that's enough to organize and retain all the committee chairmanships. It's a big advantage.

It will be a conservative session. Democratic liberals gained strength, especially in the Senate—such men as Clark of Pennsylvania, and Carroll of Colorado. They will line up with Humphrey of Minnesota, Douglas of Illinois, Morse of Oregon, etc. But they still will be only a very highly vocal minority, without support of a majority of Democrats.

—●—
Pres. Eisenhower's prestige will be high. His November sweep will give his proposals great weight. But there's trouble ahead.

The President will be called a lame duck. Under the Constitution, he can't run again. This will blunt his leadership with Congress.

The buildup of Nixon for 1960 will be attacked. It's now clear that the Vice-President is being given a bigger and bigger role by the White House. Rightly or wrongly, the Democrats take this as a sign that Eisenhower is trying to pick a successor—and they will be out to cut Nixon down at every opportunity. This will show up in Congress.

—●—
The legislative slate will be heavy—loaded with the measures that were left over from the past session besides the new proposals that Eisenhower and the Democratic leadership will offer.

But final action will be limited. Both parties will be preoccupied with building up political fences—getting ready for the 1958 House and Senate elections. The result will be that many of the politically important bills will go over until 1958, when the next bid will be made for support at the polls.

Take aid to education. Both parties favor legislation. But there is no agreement on the kind of help Washington should offer.

The White House won't insist so much on local spending. Expectation is that Eisenhower will go for more direct federal spending, which will mean less at the local level.

Democrats will split again on the issue. As a party, they like the idea of giving federal funds generously. But they can't get together on the race problem. You will see another hard fight to take mandatory integration out of any federal school bill. This obstacle may well delay Congressional action in 1957—put it off to 1958, the next Congressional election year.

The White House will push integration hard. Eisenhower cracked the old Democratic block of Negro voters this fall, not just in the big cities of the North, but in the cities of the South, too. The aim will be to give the GOP's 1960 Presidential candidate an even bigger advantage where the Negroes vote big.

More injunction power for the Justice Dept. will be high on the Administration list. What the Administration wants is authority to go to court and get an injunction where civil rights are threatened—not wait until acts occur.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
DEC. 29, 1956

Congress will be slow to vote this. The states, generally, don't like the idea of Washington stepping in with police powers.

Statehood for Hawaii and Alaska will come up again. But the outlook for the statehood bills still is dim, at best.

—•—

Labor will score some gains in the new Congress.

The Taft-Hartley emergency strike section won't be revised. Neither party expects any action on this issue.

But the minimum wage will be extended, though maybe not before 1958. The aim, agreed to by both parties, is to narrow exemptions—bring in retail and service trades workers not now covered by the law. This has a much better chance than an increase in the minimum wage, now \$1.

A Taft-Hartley exemption for the building trades is possible, but will be fought hard by members of both parties. There is union opposition to this one, too. The industrial unions fear that if the building trades ever got special T-H treatment, any further chance to change this law would be seriously weakened.

—•—

Federal regulation of natural gas prices: The White House will go along with a new exemption bill for intrastate operations if the industry can agree on what policy should be. But no action is assured; the gas industry is split. Local distributors, who operate under local rate control, don't like the idea of producers being able to charge what they can get. Action on a new Fulbright-Harris bill is doubtful.

An antitrust exemption by Congress for oil companies cooperating in the fuel for Europe program is in doubt. Most members of Congress agree that the Justice Dept. O.K. for current shipping and marketing agreements is essential. But Congress will balk at voting its own O.K. for what many members consider a "cartel deal" in the emergency.

—•—

Corn farmers will be voted a break. They will be given a bigger acreage allotment for 1957 and an opportunity to participate in the soil bank. Action on this will bring a review of the whole Benson farm program, but changes voted in the new year are expected to be very limited.

—•—

Here's how to read the budget, which will make news about the middle of the month:

Spending will be up, primarily for defense. The rise will be over \$2-billion, or about 5%. Many news stories will relate this to Hungary and the Middle East—show it as a defense stepup. The increase is due mainly to rising costs, not to any expansion of defense goals.

—•—

The pressure on the budget will be terrific. However, all estimates point to a modest surplus in fiscal 1958, if the current prosperity continues and the tax revenue continues to come in. That prospect is predicted with great certainty. What the Administration will be fighting is increased costs on the one hand and demands for loosening of credit on the other—in order to maintain the stable dollar goal.



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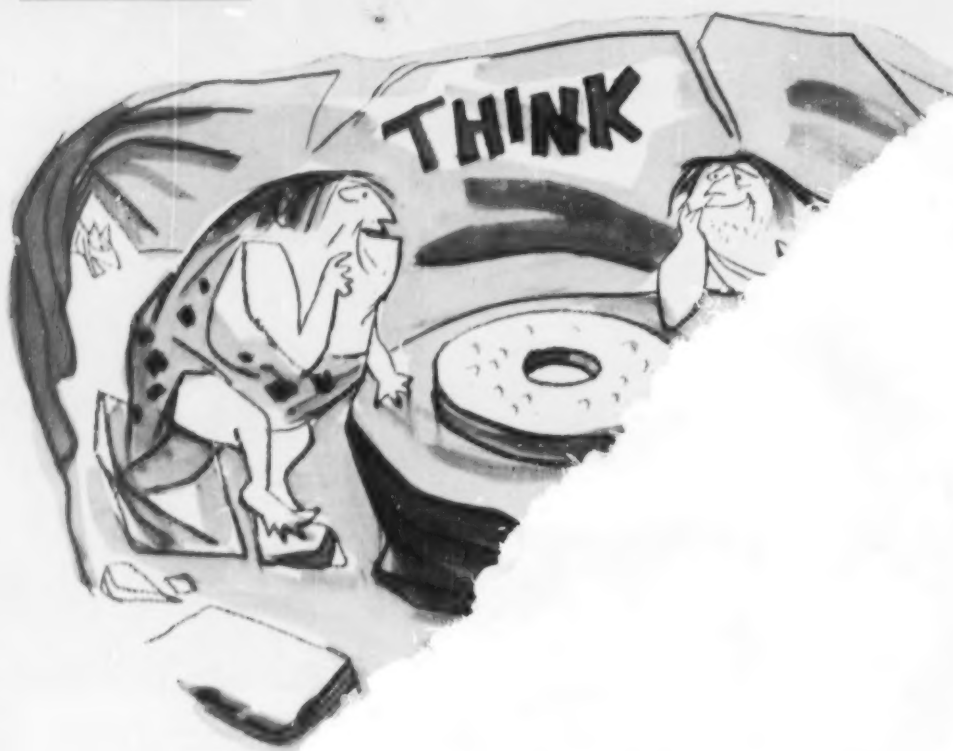
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About the easiest way nowadays to insure a big turnout at a meeting is to announce a demonstration of brainstorming. This craze has swept through industry in the past year or two (BW—Oct.22'55,p112), and now it's overflowing into government, the sciences, even social work.

On the surface, the entrenched position of brainstorming in management would seem unassailable. Its respectability is attested by the list of giant corporations that have adopted it—General Electric, du Pont, U.S. Steel, IBM, RCA, and many others. It is standard procedure in the three armed services and a growing number of other government agencies. Women's clubs use it; so do scientific societies and domestic relations courts.

Yet this rush to stage no-holds-barred bull sessions as a way of generating ideas may have been too fast, too indiscriminate. Experts in the field are beginning to question both the merits of the technique and the uses to which it is being put. The criticism doesn't come wholly from unbelievers, either. Some of the most ardent advocates of

Also, Durs...
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• Embroidery...
ing" originated...
world, but more...
have dressed up the...
technique. Some of its...
more dignified terminologies...
"creative thinking" or "problem...
sessions." Others speak more...
"ideation," "imaginering," or...
rama sessions."

But they're all talking about the same thing.

I. Rules of the Game

The theory of brainstorming is simple. A group of people sit around a table, a problem is presented, and everybody fires away with ideas on how to solve it—the wilder the idea, the better. No one can judge or criticize any idea.

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• When and ...
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about how to get...

session. For example, Osborn thinks a session is most desirable, since best ideas are always the last ones session—most good ideas are on other ideas." In con- B. Schmidhauser, who forming sessions for the gement nt Assn., insists three minutes long come at the

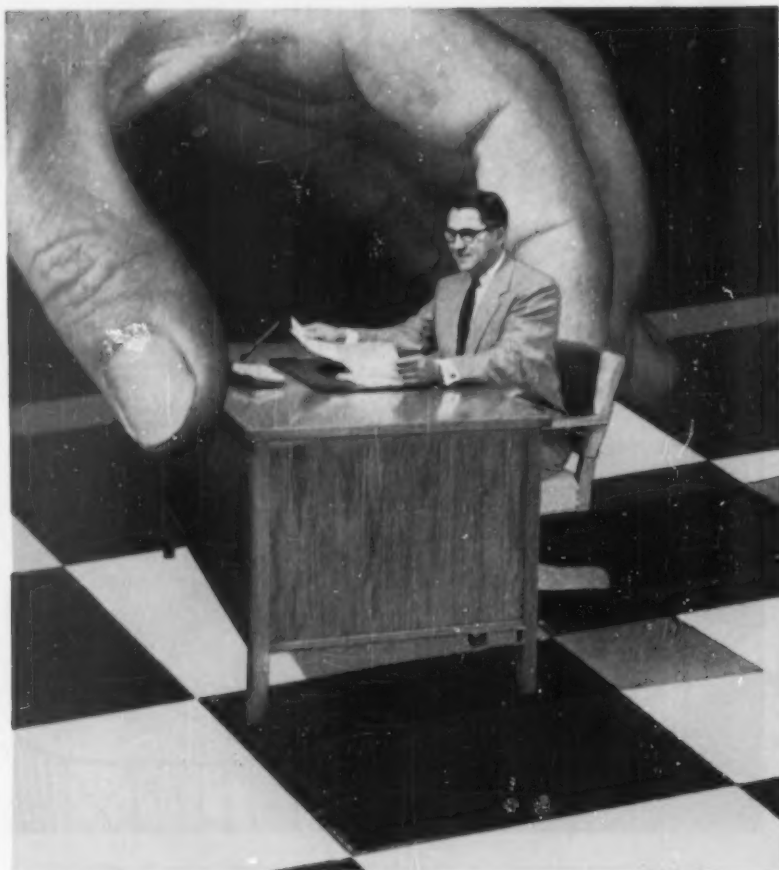
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help you set
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and decide which idea has potential.

- **Editing**—"That's when my headaches start," says one executive who has filled this role. "With one idea at a time, I can consider the angles, make a decision. But now I've got to decide which of 187 ideas are best."

"The brainstormers are encouraged to shoot wild to uncover a good idea. But the first thing I do is cross off all the silly-sounding things—silly to me—and all the things I know are stale or have already been tried and discarded. Then maybe I have a half-dozen left. Then what? A full-scale investigation of each? Maybe, but I can't order it, so it gets bucked through channels."

"In the end, whatever was there in the first place has either been lost or has been so changed and distorted in going through channels that there's not much resemblance left."

Prof. John Arnold, who teaches creativity at Massachusetts Institute of Technology, adds: "Few ideas are in themselves practical. It is for want of imagination in applying them, rather than in acquiring them, that they fail. The creative process doesn't end with an idea—it only starts with an idea."

- **Ways Out**—The commonest form of brainstorming rules out any evaluation of ideas as they emerge, but it also calls for subsequent evaluation by an individual or a small committee not involved in the original session.

One modification, developed by Arthur D. Little Co., does permit judgment of ideas as the session rolls along, aiming at synthesizing the thought of the entire group. This kind of session comes closer to the standard staff conference, but it also aims at avoiding dominance by an individual or a clique.

Dr. Samuel Trull advocates a follow-up to brainstorming. He splits up the group to investigate and reorganize the original ideas, finally to come back together for a full-dress review. By this time, the first ideas may have been utterly transformed.

There's still another school of thought that holds that the person making the suggestion should be forced to do his own evaluating, should explore the production, marketing, and financing possibilities.

"An idea doesn't exist in a vacuum," says a disciple of this stern doctrine, "and an unusable product is just as well not thought up."

This view is unorthodox. To most brainstormers, the applicability of any idea is far less important than the fact that it has been articulated.

III. Morale-Builder

Some consultants say, in fact, that the great benefit of brainstorming is not the new ideas but the boost to

con-
blocks
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way, a ma-
ideas, no ma-
If he gets tha-
ting kicked in the
ulate him to have
again."

"And when nothing ha-
out his ideas," retorts a po-
"he draws further back in his ...

This kind of doubt is why AM-
instance, advises brainstorming on-
for presidents and vice-presidents, using
it chiefly to create "spontaneity," the
ability to meet a situation in a new and
different way.

"If we can open their minds to the
recognition that there is more than
one solution to a problem," says
Schmidhauser, "they'll be far more sen-
sitive to new ideas."

• **Gripe Outlet**—Other advisers favor
brainstorming as a morale gimmick.

"The ideas usually aren't worth a
damn," says an executive of a company
that does a good deal of brainstorming,
"but it makes the rank and file think
somebody's finally listening to their
ideas."

Some brainstorm sessions are thinly
disguised gripe meetings, built around
such vague "problems" as "What can
be done to improve relations in the ZQ
Co." Most suggestions, though phrased
positively, actually are complaints
against existing conditions.

Some executives treat the method
even more cynically. In one not un-
typical case, management wanted to
spur competition among workers by
public display of comparative perform-
ance charts, but the union objected.
When the planted "suggestion" ap-
peared among a couple of hundred ideas
from a lower-echelon brainstorm, the
front office put it into effect immedi-
ately on a "you suggested it yourself"
basis.

Where brainstorming is being tried
in all sincerity, its strongest talking
point is its speed as a collection agency
for ideas.

"Essentially," says a top engineering
official of a big corporation, "it's the
same process that takes place when an
individual is stewing over a problem,
talking it over with a dozen other
people over a period of time, investi-
gating the literature on the subject.
After a while, the total accumulation of
material falls together. The real value
of brainstorming is that the group can
draw more quickly on a bigger pool of
knowledge and understanding. But the
problem will still be solved by the indi-
vidual, not the group."

• **Variation of Theme**—Even the most

IV

The
virtue of
studies that
is more than
components.

In one such stu-
dians was split, one
as a group and the other
down as many suggestions
think of, individually and with-
ing to anyone else. The brain-
group produced 50% more
cated ideas than the others.

The validity of this test has be-
challenged. "In the first place," says a
dissenter, "there was no attempt at
comparative valuation of ideas aside
from sheer numbers. Who knows
where the better ones were?"

"More important," he adds, "the test
was rigged. No one thinks in a vac-
uum. But in the normal course of
events, each man would have been talk-
ing to others, bouncing off ideas, pick-
ing up sparks."

"If they would re-run the test—half
in a brainstorming session, the other
half working individually but with
normal intercourse among them—I'd
bet that the individuals would come
up with a higher score of usable
ideas."

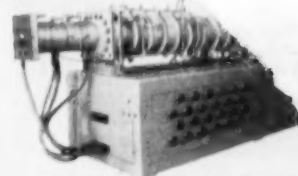
• **Teaching Creativity**—Still, many of
the brainstormers are convinced that the
group approach actually trains the in-
dividual to "think creatively." And
they offer courses to prove it. One
brainstorming course in the Army, for
enlisted men, lasts two hours. Others
in universities and companies take a
full year.

One fairly typical 14-week course, ac-
cording to its syllabus, spends four
weeks on the technique (at some lunch-
con meetings, the basics are taught in
about five minutes) and the other 10
weeks on office power tactics—"how to
sell your idea to the boss after you've
got it."

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many ideas they can dream up in a given time. It claims a gain in fluency of ideas from an average of 82 suggestions to 116.

General Electric Co. says men who have trained in its "creative engineering program" generate new processes and patentable ideas at three times the "untrained" rate. However, GE's candidates for this special training must have been at the top of his college class, have at least one advanced degree, must have passed at least one advanced technical course at GE with a high rating, and previously have proved his own "creativity."

• **Chicken or Egg?**—"Even the brainstorm boys concede that not more than 10% of the ideas are any good," says a critic. "How does anyone know that the 10% don't come from the same few individuals who were doing all the creative thinking on their own time anyway before this fad came along? Can anyone prove that the guy who never had an idea before comes out with worthwhile ones in the group? Or that the naturally creative guy is being really stimulated by the banal suggestions of the rest around the table?"

"Sure, you can tell people to think," this skeptic says. "But think about what? Dinner? The newest sex bomb?"

• **A Crutch?**—Simple brainstorming, Dr. Trull suggests, suffers from superficiality. "And," he says, "it tends to postpone individual thinking, to encourage reliance on group thinking alone."

Bernard Benson, head of a West Coast business in applied cybernetics, says brainstorming unquestionably brings out ideas that wouldn't have come to someone who sat watching television instead. But he denies that "divine inspiration" falls on anyone, with or apart from a group, who lacks solid knowledge and experience and doesn't apply systematic thought to a problem.

George Samerjan, New York artist-designer, goes even further. He says brainstorming is becoming a crutch for individual thinking. "A man counts on being inspired when he joins the group, so he can stop thinking alone."

Osborn himself says that no one can get away from thinking judiciously, that imagination without judgment is far more deplorable than judgment without imagination.

• **Recognition**—Everyone seems to agree on one virtue of brainstorming—it gets people to express themselves in public.

"In our company," says one high executive, "an executive is often rated more highly if he makes no mistakes than if he suggests lots of ideas. If brainstorming can give higher place to the idea man than to the careful man, we might all be better off." **END**

In Management

• • •

One Way to Scotch Merger Talk

—Put Your Stock in Voting Trust

Alan Wood Steel Co. of Conshohocken, Pa. (1956 sales: about \$70-million), beset by rumors of sale or merger, silenced the talk last week by turning over voting privileges on 45% of the outstanding stock to a seven-man voting trust. The trust will last 10 years. In the next few months it will get enough additional stock to give it voting rights for at least 51% of the outstanding common.

Although any of the shares can be sold during the 10-year period, voting privileges will remain in the hands of the trustees for the duration of the trust. Prospective buyers of a company aren't likely to purchase stock that does not carry voting rights. Trustees include Harleston R. Wood, president of the company, and two other members of the Wood family, which has controlled the company for five generations. One other trustee is a company officer, and two are directors.

Pres. Wood said it was the merger rumors alone that forced the setting up of the 10-year trust. For example, he recalled, "one of our biggest customers tracked me down in Seattle earlier this year to ask me to confirm or deny those rumors. He feared losing a source of supply if we sold out." In addition, Wood explained, "potential employees questioned the advisability of coming to work for us. They weren't sure they'd be working for the same management that hired them."

The voting trust also avoids the possibility of a situation such as that in which Fairbanks, Morse & Co. is involved. At least two members of the Morse family sold their holdings to Leopold D. Silberstein's Penn-Texas Corp., which is seeking to gain control of Fairbanks, Morse (BW—Dec. 15'56,p179).

Other steel merger rumors are going through Wall Street. One, suggesting an imminent marriage between Inland Steel Co. and Detroit Steel Corp., has been officially denied. But last week another proved accurate. Jones & Laughlin Steel Corp. announced its plans to enter the stainless steel business through acquisition of Rotary Electric Steel Co., of Detroit.

• • •

Kennecott and Allied Chemical

Join in New Titanium Venture

Another big "50-50" company is being formed (BW—Oct.6'56,p88). This time Kennecott's Copper and Allied Chemical & Dye are joining up to produce titanium by a new continuous reduction process. A \$40-million initial investment is planned, with production scheduled to begin by late 1958. The first announcement didn't give the new company a name. The plant site is still to be selected from several under consideration, but a location near Niagara Falls seemed likely. All the new company would say about its future output was that it would be

"very competitive" on the basis of plant investment per dollar of output; educated guesses says this means at least 7,000 to 8,000 tons of titanium sponge per year.

The reduction process was developed in Allied's Solvay Process Div., and a new fabricating procedure for turning out "more malleable" billets (ingots) was worked out by Kennecott's Chase Brass & Copper Co.

• • •

Avco Gets a New President;

Emanuel Stays as Chairman

Avco Mfg. Co., which has just discontinued its appliance and consumer goods lines (BW—Nov. 3'56,p39), has chosen Raymond A. Rich as its new president. Rich's last job: vice-president of the Philco Corp. and general manager of its appliance division. Rich replaces Victor Emanuel, who continues as chairman of the board.

Rich, who is 44, had World War II experience in the type of industrial and defense work on which Avco is now concentrating. He handled purchasing and subcontracting as a co-manager of a defense division of General Electric, and was an adviser to the chairman of the Smaller War Plants Corp. Later he was in the Navy. Before joining Philco in 1948, he was a partner in the New York consulting firm of Van Doren, Nowland & Schladermundt.

Last year, when Avco included the now-defunct Crosley and Bendix divisions, its sales totaled near \$300-million, down some \$75 million from 1954. Sales for the first nine months of this year ran some 20% above 1955.

• • •

Management Briefs

Army-trained technicians who go to work for private industry "are not lost," a Senate-House subcommittee was told last week. Albert F. Sperry, president of the Panellit Corp., said it's actually a function of the armed services to train the skilled men needed by modern manufacturing setups. Military leaders had previously complained that their trainees were siphoned off by business offers of higher salaries.

Although fewer companies handed out Christmas bonuses this year (BW—Dec.1'56,p154), that is still one of the most popular ways of giving extra cash to foremen. Yuletide gifts and profit-sharing plans ranked highest among various bonus systems found in a recent survey of manufacturing companies by the National Foremen's Institute, a section of Vision, Inc. Two-thirds of the companies surveyed gave some sort of foreman's bonus, with the norm coming around 10% of annual salary, or \$600. The range, however, goes all the way from 1% to 40%.

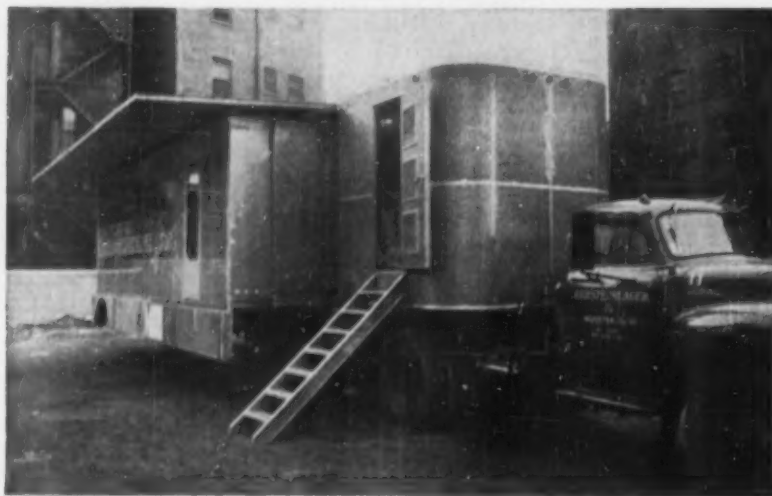
A new employee benefit has been popping up around the country: Salk polio vaccine shots. Several firms are offering their employees the set of three inoculations free, finding close to 100% acceptance. Immunizations are administered on company time and premises, supervised by local doctors.

NEW PRODUCTS

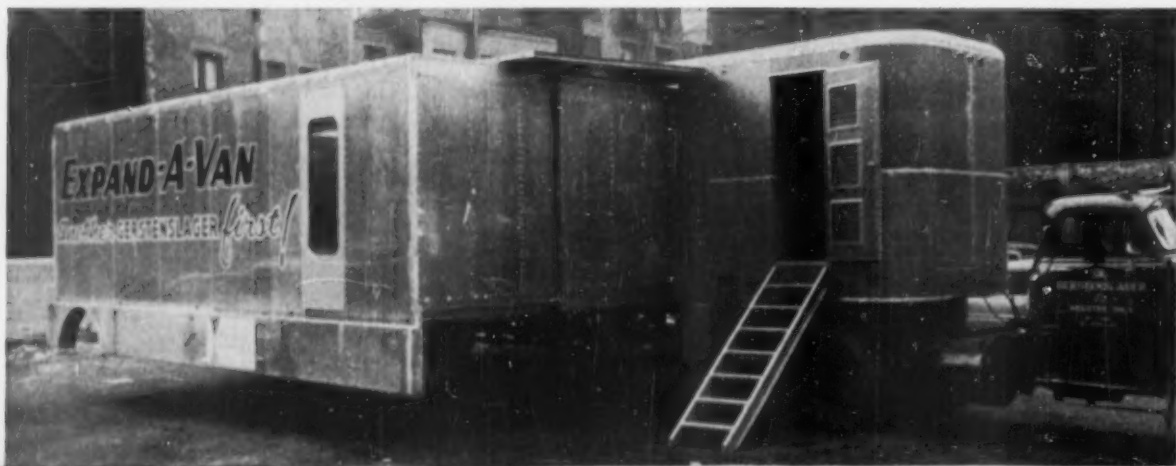
Push a Button, Get a Dance Hall



Conventional-sized semi-trailer . . .



. . . Balloons to ballroom dimensions



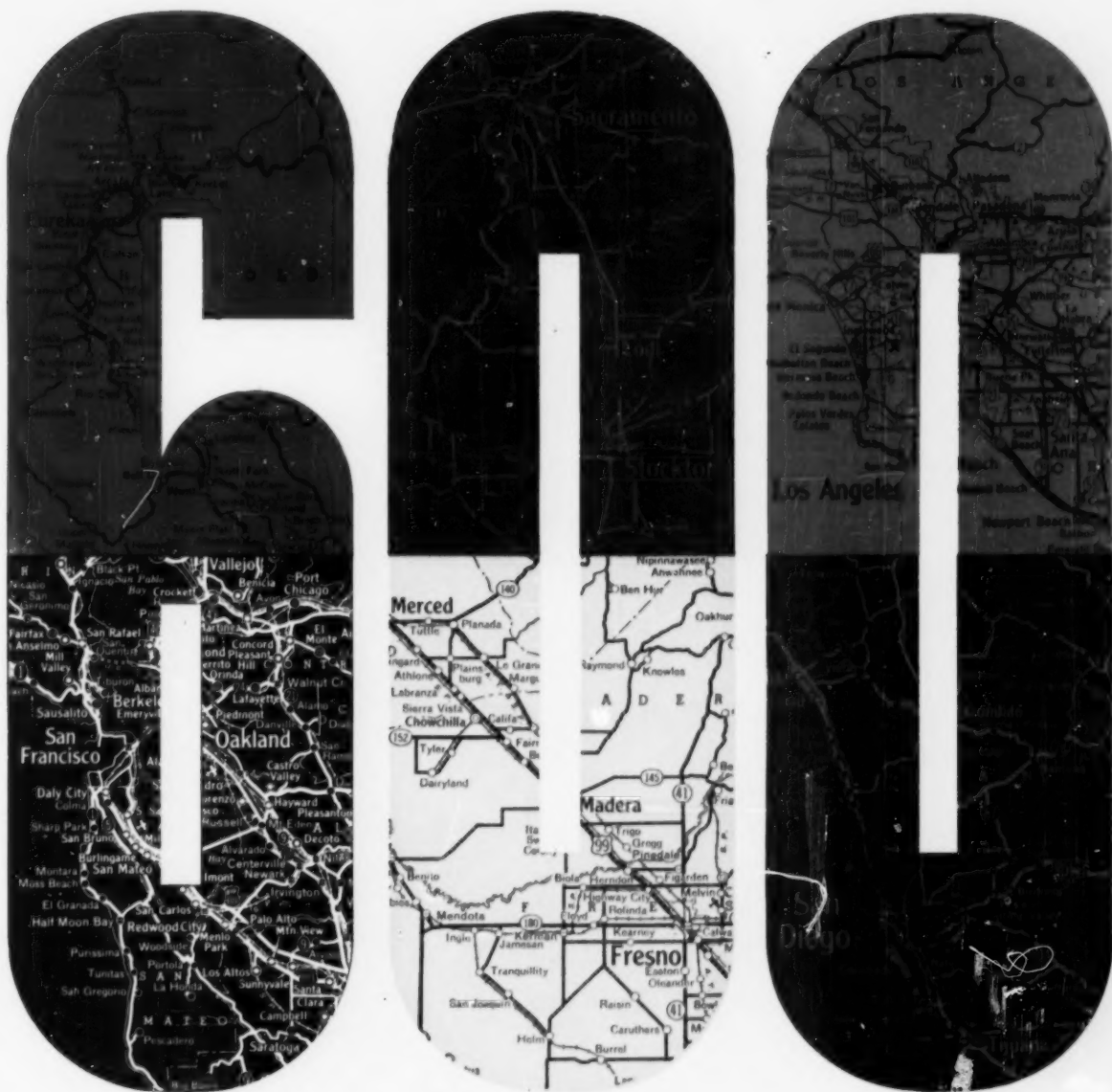
A trailer that grows at the touch of a button opens broad new portable shelter possibilities. Manufactured by Gerstenslager Co. of Wooster, Ohio, the 14-ton trailer looks like any other commonly used semibody when closed. But within 5 min. after a button on the body is pushed spectacular things happen. The inside area of 150 sq. ft. balloons to a ballroom-sized 780 sq. ft., an area large enough to seat more than 125.

• **More Uses**—Ernest P. Martin, president of Gerstenslager, believes that although all the possibilities have not been explored, the trailer will find extensive use as a service vehicle for the armed forces, traveling exhibit housing for industrial displays, and possibly even as a home for the house-trailer devotee. And more speculatively as a barracks (the trailer will sleep more than 40), radar station, or mobile machine shop.

The front end of the trailer carries a portable generator that powers the lighting and hydraulic expansion system. It is insulated and when equipped with a heating or air conditioning system the trailer will be able to withstand temperature extremes ranging from as low as 40 degrees below zero to more than 120 degrees.

Aluminum Co. of America cooperated with the truck manufacturer in the design and construction of this 35-ft. trailer, which is probably the largest in the world when expanded. It has interior dimensions of 30 ft. by 26 ft., and is 7½ ft. high. When the job was completed, the 28,000-lb. trailer contained more than 12 tons of aluminum in the form of extrusions, sheet, plate, and castings.

Until production begins, it is impossible to determine unit cost, but it has been estimated roughly to be somewhere in the neighborhood of \$25,000.



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1906 - 1956

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NEW PRODUCTS BRIEFS

A farm machine that does just about everything but explain parity to the cows has been put into production by Norton Portland Corp., Kennebunk, Me. In one operation, the 12-ton Wuns-over completely prepares the soil, limes and fertilizes it, and plants the seed. It can handle up to five acres in one hour. It sells for \$37,000.

Flameproof confetti is flying on the party circuit for the first time, according to Dana E. Frye of Dennison Mfg. Co. The multi-color flameproof "ammunition" is made from the same flameproof crepe that Dennison introduced last year. It retails for 10¢ a bag.

Safety glass that retains its full strength and clarity at temperatures ranging from -65F to 350F has silicone rubber as its center layer. The new safety layer, identified as "Silastic Type K", was developed by Dow Corning Corp. in conjunction with Wright Air Development Center for use in supersonic aircraft windshields.

Aluminum-clad copper wire—combining the high electrical conductivity of copper, the superior oxidation resistance of aluminum, and the added protection of modern insulating enamel—has been developed by Westinghouse. The skin is said to increase the life, reduce the size, and raise the efficiency of electrical equipment by allowing it to operate over long periods of time at higher temperatures than are now practical.

A highly portable drill rig is being operated by the Shell Oil Corp. in the oil fields of the Denver-Julesburg basin. The rig, which can be set up in an hour or two, has an electric drive that is easier to knock down and set-up than mechanical transmissions. The rig, which can operate to 7,000 feet, is transported by three trailers. The motor generator control package was developed by General Electric; the rig built by Ideco, a Dresser Industries subsidiary.

A 150,000 lb. broaching machine has been developed by the LaPointe Machine Tool Co., Hudson, Mass. The manufacturer says it's the largest ever made. It is being used to broach the "pine tree" holding-slots in gas turbine wheels.

The "explosion" of lock rings when a truck tire is inflated has been eliminated by a new tool, according to Harvel Co. of Pico, Calif., the manufacturer. The new tool also demounts truck tires quickly, without use of a pry bar and sledge hammer. Retail price is \$198 f. o. b. factory.



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WORLD-WIDE MOVING: LAND, SEA, AIR

Cementing a Boom In Concrete Building



ROGER CORBETTA (center rear) takes gander at progress on \$12-million concrete hangar he's building for Pan American at the Idlewild airport.

It takes savvy, dynamic energy, and the guts of a gambler to get to the top as a general contractor in the building and heavy construction industry jungle. The job is twice as hard if you take time out for such frivolities as promoting industry-wide standards and practices. Construction men will change the face of the earth—but not their own business, especially if the ideas come from someone else.

Such, however, are the accomplishments of Roger H. Corbetta (cover picture), president of the Corbetta Construction Corp. of New York and Chicago. Corbetta's favorite topic of conversation is concrete—and no wonder, since it's something with which he does about \$30-million worth of business a year.

• **Monuments**—From modest beginnings in 1922, Corbetta has turned out more than \$360-million in landmarks of his contracting prowess—highways, bridge foundations, housing developments, piers, drydocks, and, among other projects, even a concrete landing craft that's virtually unsinkable.

In both building and heavy construction circles, the progressive Corbetta is respected as one of the few indeed who have become elder statesmen. He has supplied sinew for such improvement programs as the New York Concrete Industry Board—a working group dedicated to upgrading concrete wherever it's used. And he has taken to the podium to plump for better utilization of concrete before many professional audiences.

• **Booming**—The construction industry's rosy future is a key to the importance of improving concrete methods and standards. For example:

• Dollar volume in the industry is expected to rise from \$44-billion to \$59-billion in the next decade, according to estimates of Engineering News-Record, a McGraw-Hill publication.

• In the next 13 years, the U. S. highway program alone will use some 200-million tons of cement. Total construction spending—including maintenance—now runs about \$60-billion, will rise to \$64-billion in 1957.

• And concrete has a place in every construction job.

• **Brawling**—Concrete is one vital seg-





NEVER BOUND to his desk, Corbetta here clammers over Idlewild hangar project to check the forms for the unique folded plate concrete roof—one of new uses for the material.

ENGINEERING is vital to a contracting outfit. Corbetta (left) looks at blueprints designed by staff, credited with many "firsts."



IN TOUCH with company's projects constantly, Corbetta here checks with New York headquarters from temporary office along New York Thruway, to which he is adding link.





ALABAMA
Birmingham 5, (51)
Pump Shop, Inc.
1818 10th Ave. South
Phone 4-8712

CALIFORNIA
Los Angeles 50, (51)
E. J. Burton
4122 Long Beach Ave.
Phone 481-6146

ILLINOIS
Chicago 16, (51)
Viking Machine & Tool
201 East Millard Ave.
Phone 674-1001

INDIANA
Indianapolis 25, (51)
E. J. Burton
4122 Long Beach Ave.
Phone 481-6146

KANSAS
Overland Park
(Kansas City)
P. I. Plumber
7113 W. 21st Street
Phone 382-2222

KENTUCKY
Louisville 12, (51)
Holt Lumber Supply Co.
2211 So. Brook St.
Phone 424-0401

LOUISIANA
New Orleans 12, (51)
Holt Lumber Supply Co.
2211 So. Brook St.
Phone 424-0401

MARYLAND
Baltimore 15, (51)
Walter H. Egan Co.
231 President St.
Phone 1-674-1142

MASSACHUSETTS
Somerville 43, (51)
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100 Vine St.
Phone 624-0401

MICHIGAN
Detroit 26, (51)
Holt Lumber Supply Co.
100 Vine St.
Phone 624-0401

MINNESOTA
Minneapolis 12, (51)
Holt Lumber Supply Co.
100 Vine St.
Phone 624-0401

MISSOURI
St. Louis 1, (51)
Holt Lumber Supply Co.
100 Vine St.
Phone 624-0401

NEW JERSEY
Newark 12, (51)
Holt Lumber Supply Co.
100 Vine St.
Phone 624-0401

NEW YORK
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Holt Lumber Supply Co.
100 Vine St.
Phone 624-0401

OHIO
Cincinnati 2, (51)
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100 Vine St.
Phone 624-0401

PENNSYLVANIA
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100 Vine St.
Phone 624-0401

TEXAS
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100 Vine St.
Phone 624-0401

VIRGINIA
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100 Vine St.
Phone 624-0401

WISCONSIN
Milwaukee 12, (51)
Holt Lumber Supply Co.
100 Vine St.
Phone 624-0401

WASHINGTON
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Holt Lumber Supply Co.
100 Vine St.
Phone 624-0401

WEST VIRGINIA
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Holt Lumber Supply Co.
100 Vine St.
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WYOMING
Cheyenne 12, (51)
Holt Lumber Supply Co.
100 Vine St.
Phone 624-0401



(Story starts on page 56)

ment of a hurly-burly industry, by far the biggest in the U.S. Yet for all its size, construction has no one boss, no one spokesman. It grew in chain reaction out of trade specialties.

Today, more than 500,000 businesses call themselves contractors. More than 4-million persons man the front offices, drawingboards, bulldozers, shovels, and hand trowels. Nineteen skilled-trade and four sub-trade specialty labor unions are thoroughly organized on an industry-wide basis. But there's no parallel grouping among contractors. They are clustered (if at all) into specialized organizations such as the Assn. of General Contractors (heavy construction), National Assn. of Home Builders, American Road Builders Assn., and so on.

All use concrete—and all think they're experts on the subject.

I. Up the Proverbial Ladder

It takes a man like Corbetta to star in such a jumbled industry. Largely self-educated, he possesses unusual gifts—intelligence and an ability to channel incredible energy where it does the most good. He's a gambler, too—happiest risking lots of money on the really tough, challenging jobs.

Some of the tasks on which Corbetta is currently proving his mettle:

- A \$17-million seaport for the U.S. Navy in Rota, Spain.
- A \$15-million link on the New York Thruway.
- A barracks in Illinois.
- A huge public housing complex in Chicago.
- An \$11-million drydock for the Brooklyn Navy Yard.
- An upstate New York cement plant, costing \$10-million, for Lone Star Cement Corp.
- A \$12-million aircraft hangar, of radically new type, for Pan American at New York International Airport (Idlewild) (pictures, pages 56-57).

Corbetta's diversity shows up, too, in his most recently completed jobs—including a group of 1,680 concrete houses in Las Lomas, Puerto Rico; Manhattan's Pier 57, and the caissons for the Tappan Zee Bridge across the Hudson River at Tarrytown.

• **New Ways**—The company's leadership is also evident in the new techniques it has pioneered for concrete:

- It was first to reduce labor in enclosing large areas by using plywood for forms.
- It proved out the use of pumps for pouring concrete.
- It was first in New York City (and probably the nation) to use concrete from central batching plants (ready-mix) for pouring floors and to

employ vacuum pads to remove excess water from fresh pours, for faster curing.

• It has been among U. S. leaders in pre-cast and pre-stressed concrete structure methods.

"When you're looking for new techniques," says Corbetta, "keep your eye on the fellow who's small and coming up the ladder. He's got nothing to lose but his shirt, and he'll try anything. The big outfits don't want to gamble. They know how to make money doing it the ordinary way."

"When you're a nobody," Corbetta adds from experience, "you've got to try new methods. It's the only way you can get people to notice you. And you've got to be noticed to get financing to handle the really big contracts."

• **Rung by Rung**—Corbetta knows what it's like to come up the ladder as an unknown. Born of immigrant parents in New York City 60 years ago, he went to work for his father, a mosaic tile and marble contractor, at 14. At 16, he apprenticed out as a cement mason, and at 18 he was secretary of his local union. After overseas service with the 22nd Regiment in World War I, he was elected president of Local 570 of the Cement Masons Union.

In 1922, Corbetta ventured out on his own with the Corney Construction Co., jointly with William C. Meyer. Meyer quit the firm a few months later, and Corbetta Concrete Co. was born.

When the new entrepreneur won an \$1,100 contract for paving sidewalks in the Bronx, he was so excited at getting into the thousands that he rushed home to tell his wife. But life wasn't all lovely. After 10 years of struggling along with a variety of subcontract jobs, the outfit succumbed in 1932, because a couple of prime contractors didn't pay their bills.

Corbetta went broke, but he managed to satisfy his creditors in full. In 1934, he formed Corbetta Construction Corp. with Michael Del Balso, another New Yorker.

• **Dramatic**—From that time on, Corbetta couldn't be stopped. Once, he lost a Navy Yard contract to a better-known competitor because his firm didn't have a record with the Navy. So he drew their attention by putting up a 16-story concrete apartment house, on a lot adjacent to the Navy Yard, in the record time of 163 days—a mark that still stands.

"We were fat on excess profits then," says Corbetta, "and we probably lost a million on the building, but after that no one ever asked who Corbetta was."

The postwar building boom brought

trouble for concrete and involved Corbetta in industry problems. In the rush to catch up with the demand for new housing and office space, there appeared countless contractors who were more than casual about quality. Competition and cost-cutting were vicious.

II. Concrete in Crisis

Concrete suffered the most from this situation. It's just about the only material manufactured right on the building site. There are a dozen ways to go wrong, if you don't know what you're doing, or cut too many corners. Since it takes 28 days for concrete to cure to full strength, there may be several stories built on top of a mistake when it's discovered.

• **Bad to Worse**—In the late 1940s, concrete in New York was just plain bad. Inspection was poor. Testing laboratories weren't doing their job. Some unscrupulous or careless contractors and central batching plants skimmed on cement, used inferior aggregates, or added too much water to concrete—which made it easier to handle at the expense of strength.

A few batching operators were as shady as the worst fly-by-night contractors. Bags of cement toppled onto inspectors' heads, levers were placed to disembowel a man if he tried to peer into an aggregate bin.

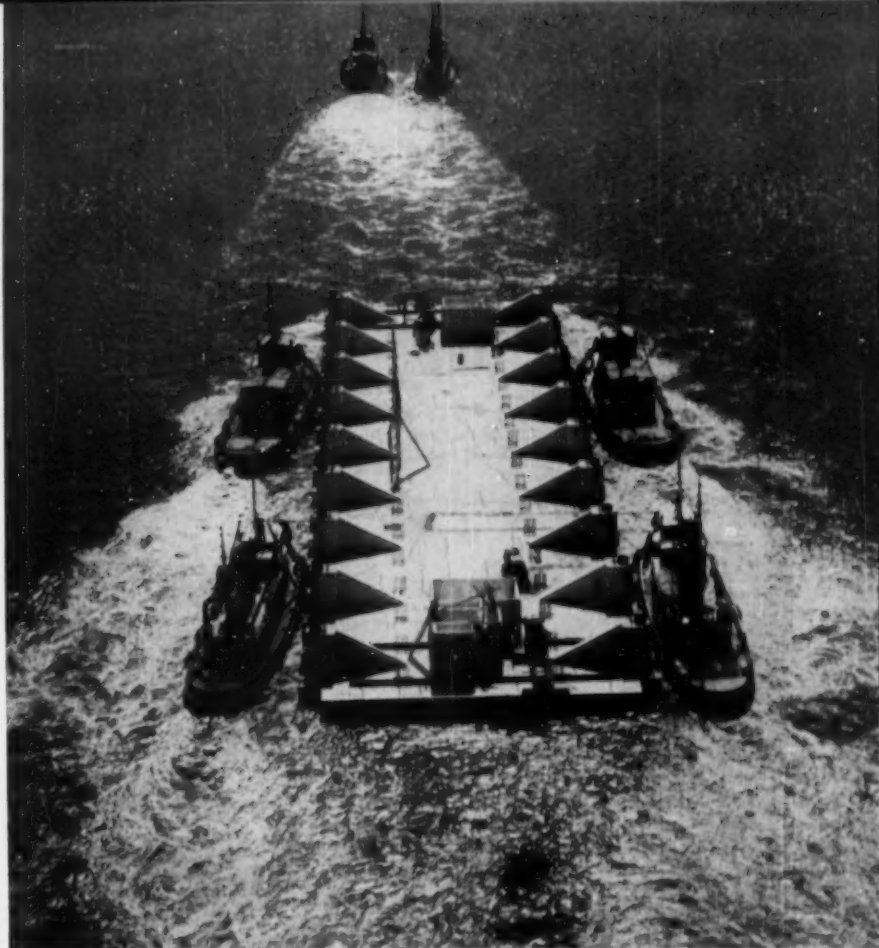
In even the best plants, there was another brand of trouble. Contractors and engineers were specifying hundreds of freak mixes, and it was practically impossible to stock all the materials that would be needed.

• **Action**—By 1950, one major buyer of concrete had had enough. John P. Riley, then head of construction for New York's Board of Education, summoned contractors, batching plant operators, engineers, and others to a meeting where he minced no words: Concrete was so bad that the city might have to resort to substitute materials—at a time when, as a result of the Korean War and steel shortages, there were more opportunities than ever for the industry.

Corbetta, among the listeners, reacted like a baited bull. From that time on, he has been an industry man. "Sure, it takes a lot of time," he says, "but don't think I do it all for those bums. If concrete is hurt, Corbetta Construction gets hurt."

"What's the use of kidding ourselves?" he will recall. "None of us was perfect, nobody could point to a spotless record. What we had to do was sit down around a table and hash it out. We knew everybody would get hurt a little, but in construction you get used to insults."

• **Critic**—And so came into being the Concrete Industry Board, known in



GIGANTIC PIER section was built by Corbetta in pumped-out lake bed along Hudson, floated downstream to Manhattan.

New York as the CIB. In its informal sessions, the CIB spared no one:

- Testing labs were told to improve techniques and start paying more money to employees.

- Cement companies drew blame for causing confusion over brand names with their sales methods.

- Architects and engineers were advised to study the potentialities of concrete and to stop allowing safety margins so wide that they almost invited sloppy work.

- Contractors faced demands to improve their inspections, stop accepting inferior metals, desist from adding too much water to the concrete.

- Batching plant operators were under criticism for their lack of standards and interference with inspections.

- Even the city didn't escape fire—for its poor inspections.

The board was tough. Corbetta went on his own inspection tours. And when he found flagrant instances of malpractice, he had no qualms about bringing the man responsible to a CIB meeting, sitting him down, and pithily listing his transgressions.

- **Success**—The plan worked. Within

two years, according to Engineering News-Record, batch-mixed concrete in the city was excellent.

The CIB has continued to meet informally. Today, with 101 corporate and 116 individual members, it is going strong under the leadership of Vice Adm. John J. Manning, retired from the Navy's civil engineers. Groups in other cities are interested in emulating New York's board, and, if they catch on, the CIB may become national.

Early next year, the board will publish its first set of standards for testing procedures, devised with the help of the National Bureau of Standards cement laboratory.

It is also at work on revisions in the building code, to concentrate sections on concrete, and on changes in regulations so that the owner or architect—not the contractor—will retain the lab that tests concrete on a project, on grounds that they are less apt to influence the testing.

III. Into the Future

The CIB's measures come at a time when concrete, like construction, is

Hoisting a 72-ton "Steel Hat" for a new "Cat" Cracker



CB&I experience creates exacting structures for industrial service

The "steel hat" swinging through the air is a 72-ton top section for a catalytic cracking unit erected by CB&I at Shell Oil Company's Norco, Louisiana refinery. The reactor-regenerator and catalyst hoppers, right, were fabricated at CB&I's Birmingham plant and furnished through the Foster-Wheeler Corporation.

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Above: Reactor-regenerator and catalyst hoppers furnished through Foster-Wheeler Corporation by Chicago Bridge & Iron Company for the Shell Oil Company refinery at Norco, Louisiana.



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Plants in BIRMINGHAM, CHICAGO, SALT LAKE CITY and GREENVILLE, PA.

"... cement consumption has more than doubled since 1940 and has climbed 50% since 1950 . . ."

STORY starts on p. 56

booming. Cement consumption has more than doubled since 1940 and has climbed 50% since 1950. In 1956, about 300-million bbl., each containing 376 lb. of cement, went into building construction and maintenance work, for some \$950-million in sales. The Bureau of Mines estimates current cement capacity at 357-million bbl., to be boosted by 1958 to 400-million bbl.

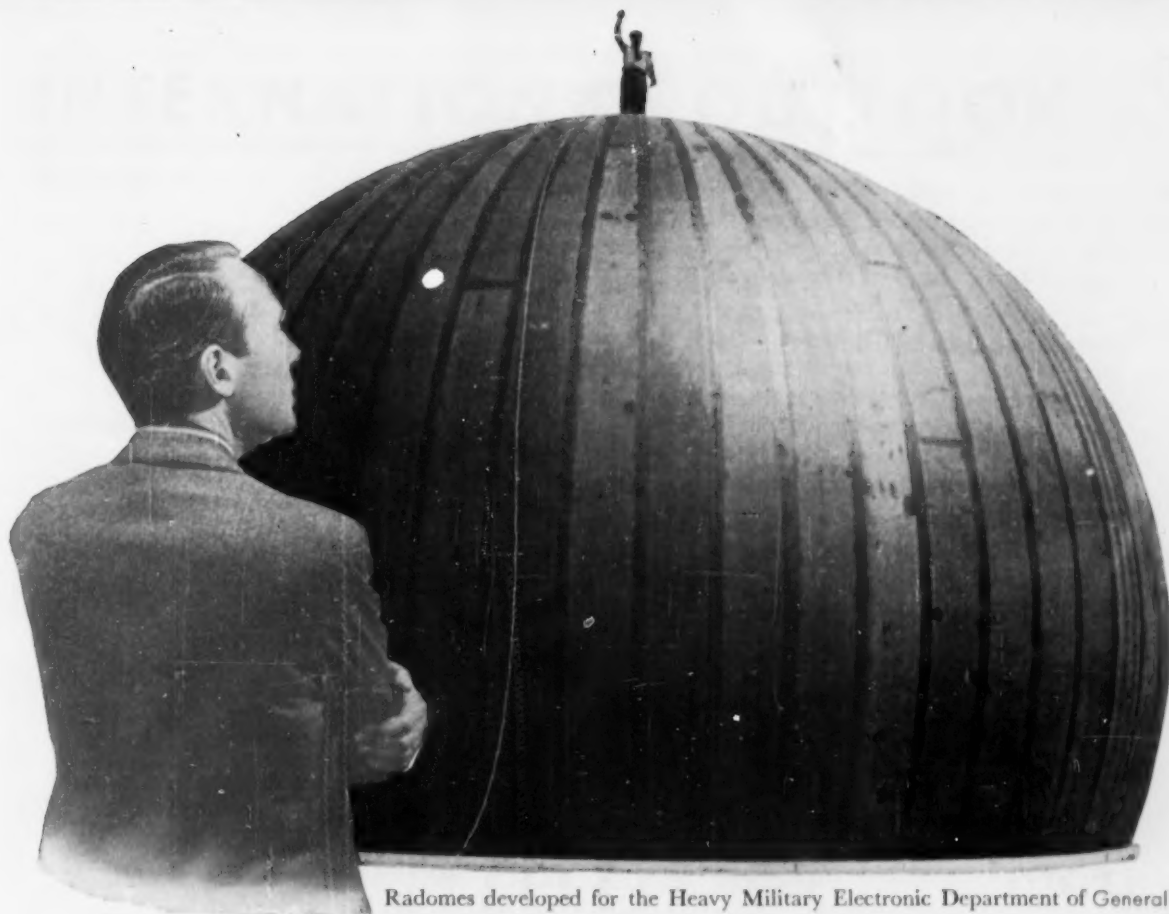
Costs of both cement and transportation are rising. Today, a barrel of cement sells for \$3 to \$3.40, about 30¢ higher than two years ago. But these prices are increasing more gradually than those for many other building materials. And bulk shipments to central batching plants (which take about one-third of all sales) are cutting costs of handling materials.

• **Streamlining**—Corbetta sees the greatest challenges in mechanization and improvement of materials. He can cite few reasons why skyscrapers won't eventually be erected by the lift slab method—now limited to 10 stories. It makes little sense, he says, to build a form 50 stories up and then hoist up all the rods and concrete—not when you can pour on the ground in a much simpler form.

And although pre-stressing and pre-casting are now accepted, Corbetta thinks they have a long way to go. With stronger concrete that will also set faster ("sure to come eventually"), why not consider traveling molds instead of mixers? In this dream of the future, it is conceivable that the concrete for a wall section or stairway, for instance, could be poured into a mold truck. After acquiring a flash set on the way to the job, it would be hoisted into place as a finished part.

• **New Twists**—Already realities are the greater use of lightweight aggregates, flexible metal forms, reusable forms, and disposable paper forms. Corbetta envisions unlimited future development in walls pre-cast with finished interior and exterior surfaces; longer spans using pre-casting and pre-stressing techniques and design innovations such as the folded plate roof designed by Harold Churchill for the new Pan American hangar.

In this marvel of construction (pictures), the only covering for a 650x120-ft. area without a column or other obstruction will be a thin, 4-in. shell of reinforced concrete. **END**



Radomes developed for the Heavy Military Electronic Department of General Electric.

He helped design a blown-up building ... perhaps he can help you, too

Cornell Aeronautical Laboratory, Inc., Buffalo, N. Y., faced a difficult design and development problem: find a coated fabric that could be used to make a dome 54 ft. in diameter, 36 ft. high—supported only by air, and yet strong enough to withstand winds up to 125 miles per hour! These "radomes," as they are called, were needed to house radar units on America's Distant-Early-Warning defense line in Canada.

Cornell picked several fabrics suitable for the job, but the coating material was a problem. It had to adhere well to each of several fabrics. It must not interfere with radar transmission or reception. And it had to resist the deteriorating effects of sunlight, ice and snow and temperatures ranging from -65°F. to 140°F.

Cornell engineers called on the technical representative

(man in red) of a rubber-goods manufacturer. Working together, they considered six different coating materials. Only neoprene, Du Pont's synthetic rubber, had the needed combination of properties: weather resistance, adhesive strength, flexibility over a wide range of temperatures and transparency to radar signals. Today, these neoprene-coated radomes are doing their vital job on a 365-day, around-the-clock basis.

You, too, can profit from the use of a Du Pont elastomer and the experience of your rubber-goods supplier. Our new free booklet describes how companies like yours have saved with neoprene for years—also, how new HYPALON® synthetic rubber has sparked striking new ideas in design and development. Just clip the coupon below for your free copy.

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Banking	Electrical Manufacturers	Meat Products	Steamship Lines
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Coal	Grain Mill Products	Oil	Wire and Cable



NEW YORK • CHICAGO • DALLAS
PORTLAND, ORE. • WASHINGTON, D. C.

INTERNATIONAL OUTLOOK

BUSINESS WEEK

DEC. 29, 1956



Washington is optimistic this week about the outlook for reopening of the Suez Canal. U.S. officials aren't impressed by Egyptian threats to block salvage operations until all Israelis are out of Egypt, or by Cairo's plans to present a big reparations bill to Britain, France, and Israel through the U.N.

As Washington sees it, the inevitable period of jockeying for political positions, prior to beginning negotiations, is just about over. Nasser, according to this view, is under heavy economic pressure at home, and under heavy diplomatic pressure from other Arab and Asian countries, to get the canal reopened.

Full-scale salvage operations should get started within the next two weeks, U.S. officials think. Latest Washington estimate is that 25% of traffic can be restored within 30 to 60 days and normal operations within six months after that.

The long, tough job of seeking basic settlements of the Suez and Israeli-Arab conflicts will get started as soon as canal salvage operations are safely under way.

The U.S. is firmly committed to working through the U.N. for a Middle Eastern settlement—despite British, French, and Israeli protests that this loads the deck in favor of Nasser. Pres. Eisenhower has even rejected suggestions that he make a personal appeal for rapid clearance of Suez because this might undermine the authority of Secretary General Dag Hammarskjöld.

Washington's determination to work through the U.N. is based on the conviction that this is the most effective way to proceed—not upon any desire to pass the buck or shirk acknowledged U.S. responsibility for getting a settlement.

Eisenhower is convinced that the days when big powers could unilaterally impose their desires upon smaller countries are passed. He feels that the U.S. can use diplomatic and economic pressure as well as economic inducements just as well through the U.N. as directly—and at the same time win wide moral and diplomatic support from the smaller nations.

The U.S. policy of channeling its influence through the U.N. could change, of course—if it doesn't work in a reasonable time.

Paris observers see two main problems dominating European political and diplomatic activity in the new year.

The first is the renewed drive to build a United Europe around such projects as Euratom and the Common Market. The second, which could have an important effect on the first, is the question of a German settlement.

Treaties covering Euratom and the Common Market will be presented to the French National Assembly early in the year. These treaties are expected to stir up the kind of political storm that the European Defense Community did in 1954. Political battle lines already are being drawn.

The political forces that opposed EDC still are active in the assembly. What's more, they are supported by an extra 40-odd Communist votes and 50-odd Poujadists. Even so, Premier Guy Mollet vows that he will push both treaties rather than try to postpone a showdown, as his predecessors did with EDC—to their ultimate sorrow.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

DEC. 29, 1956

The French foreign office thinks that a settlement of the German unity question may be in the offing.

Paris is buzzing with talk of possible new American disarmament proposals (BW—Dec.22'56,p26) and foreign office officials already are expressing fears of a united Germany. They think that such a state, unfettered by outside commitments, would quickly come to dominate the European political and economic scene.

Many Frenchmen recognize this possibility as a good and sufficient reason why France should make sure that West Germany is quickly incorporated into a cooperative European framework. Once that's done, these Frenchmen feel, a united Germany could be handled without any great strain.

London financial observers feel that Britain faces a dismal but not critical year. They say that the impact of the oil shortage is likely to be serious only in the British auto industry. And they feel that the dollar credits arranged by Washington have saved sterling for 1957—and given the British government the time to put the British economy through the kind of economic wringer it has been needing for years.

By contrast, some of Britain's academic economists, led by Roy Harrod of Oxford, predict a serious recession after midyear unless the credit squeeze is quickly relaxed and the bank rate cut immediately. Labor union spokesmen talk of their fear that there will be a million workers unemployed by spring.

Apparently such talk is part of a campaign to induce the government to inflate the domestic market and restore the boom—regardless of Britain's trade balance. But a majority of the official economists believe that inflationary forces still are dominant—and will continue to be so, barring a really big cut in defense outlay at once.

On balance, it looks as though Britain is in for moderate deflation, continued export improvement, a peak of 500,000 unemployed, and a slightly reduced industrial production index—while long-delayed adjustments are taking place in the British economy.

Indonesia's popular Pres. Soekarno faces the worst crisis since he took command of the nationalist movement in 1942. Two military commanders in Central Sumatra have revolted, demanding that Premier Sastroamidjojo—a Soekarno protege—be ousted.

The revolt is another in the series that have rocked the outer islands since Soekarno helped set up a highly centralized government in Java in 1950. The other peoples of the islands resent Javanese domination, are smarting under the corruption and mismanagement of the economy by Djakarta.

For the usually mild-mannered Central Sumatrans, the last straw came last month when Vice-Pres. Mohammed Hatta, a fellow Sumatran, resigned. He was protesting the Sastroamidjojo domestic policies and Soekarno's flirtation with the Communists.

Now it's a question of who—if anyone—backs down. Soekarno says he won't compromise with the rebels and push Sastroamidjojo out. If Hatta can't or won't bring the Sumatrans back into line, it could break up the republic.



I don't know how
the **Angel Gabriel** would have
written this advertisement
for **DETECTO** Scales

Mack Rapp, vice-president of DETECTO's industrial division, talked to me for three solid hours about DETECTO precision-engineered scales. Next day he talked for five hours more.

From this mass of information, I sat down to write the copy, emphasizing that DETECTO is a great name in industrial weighing equipment, which offers values to the scale user no other company can give.

For instance—the all-steel construction and all-steel lever system (*not cast iron*) which assures longer, trouble-free scale life and less maintenance cost.

Also the unique outboard bearing design which prevents platform tipping. This means that you get *completely* accurate weighing on any part of the scale.

And finally, DETECTO's tare and weigh beams that extend the dial capacity 125%. This means you get greater gross weigh-

ing with minimum dial graduations.

Well Sir, Mack Rapp agreed with everything I wrote, but he rejected the approach. He wanted "shouting-from-the-housetops" combined with dignity—dramatic impact with reason-why logic.

What he really wants is a platoon of angels singing the praises of DETECTO, emphasizing each exclusive feature with gentle thrumming on heavenly harps.

On my word of honor, I've re-written this adv. twelve times. I don't know how the Angel Gabriel would do it—all I can say is that DETECTO is the most trusted name in industrial scales, that it has a half century reputation for dependability and sustained accuracy—that it makes models for every industrial need . . . from 1/100 oz. to 50 tons.

I hope you send the coupon so we can tell you more about how DETECTO Scales can save time and earn more profits for you!



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Fine Scales



Since 1900

In Washington

• • •

Postoffice Hires Joe Palooka

To Push Anti-Discrimination Program

The Administration has turned to advertising to promote its equal job opportunity policy. This week, 26,000 U.S. mail trucks across the country sported on their sides a three-color poster depicting comic strip character Joe Palooka addressing a mixed group of workers with a Negro prominent among them.

It is the first time that postal trucks have been used to carry a race relations message. The poster is a project of the President's Committee on Government Contracts, headed by Vice-Pres. Nixon.

In some places, there was irate reaction to the posters. A South Carolina newspaper wondered editorially if the next step would be mail truck posters warning "Mix your schools or go to jail." But early reports indicate that most Southern postmasters are giving the posters the display recommended by the Postoffice Dept.

• • •

Nonsked Goes Into Last Round

In Fight to Keep Its CAB License

Trans American Airlines, biggest of the nation's supplemental (non-scheduled) air carriers, has its back to the wall in a legal fight to stay in business.

Last week, the U.S. Court of Appeals upheld a July, 1955, order of the Civil Aeronautics Board that is intended to ground Trans American. The board held—and the Appeals Court agreed—that Trans American's operations violated the Civil Aeronautics Act on several counts. Not the least important of the charges is that Trans American, in violation of its license, is operating an airline service featuring regular schedules.

For Trans American, it was the next to last round. The company announced that it will appeal to the Supreme Court in an attempt to save its CAB license. Meanwhile, Trans American will keep flying.

• • •

One Far West Dam Gets FPC Blessing,

Another is Caught in Crossfire

Last week was a big one for the power-hungry Far West. The Federal Power Commission gave final approval to one big dam project, and pushed a second one a step forward in the Administrative routine:

- The Water Project Authority of the State of California was licensed to build Oroville Dam and auxiliary dams on the Feather River in Butte County, Calif. The project, to cost \$420-million, will feature five generators rated at 88,000 kw. each. It also will provide flood control and irrigation benefits for the Sacramento-San Joaquin delta.

- Six months of hearings ended on the Pacific Northwest Power Co. application for the proposed Mountain Sheep-Pleasant Valley hydroelectric project just below Hell's Canyon on the Snake River between Oregon and Idaho. Next big step, prior to final action by the commission, is an examiner's decision—which probably will come in late spring or early summer.

There's a chance the Administration may upset Pacific Northwest's apple cart by coming out in favor of a new plan—a high dam at Pleasant Valley, which already has engineering backing as a more productive project (BW-Dec.1'56,p42). Company officials have been to see Interior Secy. Fred Seaton as to the Administration's intentions.

Democrats and public power groups have promised a political fight—similar to the one they lost over the Hell's Canyon high dam—if Seaton doesn't come out for a high dam idea at Pleasant Valley.

• • •

Foreign Aid Shippers Get a Boost

As Government Loosens Up on Reserve Fleet

Chances are bright for early withdrawal of more than 100 additional cargo ships from the government's reserve fleet for charter to private operators.

By this week, Washington officials have indicated tentatively they favor charter applications for at least 109 reserve vessels. Other requests await consideration. Within the past few months, 78 reserve vessels have been formally approved for withdrawal.

Spur for tapping the reserve fleet is the general short supply of ships, which has caused foreign aid shipments to fall behind, and has pushed ocean freight rates to unprecedented levels (BW-Dec.15'56,p94). Forty of the 109 ships thus far indicated for withdrawal would be devoted to hauling foreign aid cargoes, mostly grain, overseas; the others, to hauling coal for Europe and South America.

• • •

"How to" Guide Covers Everything

Small Business Needs to Know About Taxes

The Internal Revenue Service has compiled a complete "how to" guide on taxes and related problems confronting small business. The 127-page, well-indexed booklet was prepared by IRS at the request of the Senate Small Business Committee and of Sen. George A. Smathers (D-Fla.).

In layman's language, the guide covers everything from "Starting a Business" to "Sale or Other Disposition of a Business," with such items interspersed as "What Are Business Expenses," and "How to Handle Bad Debts."

The booklet costs 30¢, and can be had from district tax collectors' offices, local field offices of the Small Business Administration or Commerce Dept., or by writing to the Government Printing Office, Washington 25. Current plans are to issue revised editions of the booklet annually.

A Year of Automatic Pay Boosts

- Employers will face rising labor costs in 1957, but generally without bargaining warfare.
- Most major contracts have a year or more to run, with wage hikes written into them (table, pages 68-69).
- But the rising cost of living may bring rank-and-file pressure for more money by reopening agreements.

Labor and management won themselves a year of peace for 1957 in negotiations that led to widespread long-term contracts signed in 1955 and 1956. Few major agreements run out in the next 12 months. With bargaining pressures thus held down, the government's troubleshooting Federal Mediation & Conciliation Service is looking ahead to a "quiet" new year.

But even without table-pounding contract negotiations, 1957 looms as a year of continuing, expensive wage increases. Management's wage bill is likely to go up at least as much as it did this year; it could be boosted by even more.

• **Built-in Raises**—The Labor Dept. reported last week that approximately 5-million workers will receive automatic increases in pay during 1957 under long-term contracts. Some 550 agreements signed over the past two years provided for deferred raises ranging from 4¢ and 5¢ an hour in electrical manufacturing to 12¢ an hour or more in construction and trucking industries.

The over-all average will be between 6¢ and 8¢ an hour. Altogether, the increases will add about \$1-billion to wage costs.

The pattern of deferred raises runs through 1957 with serene repetition. Massachusetts shoeworkers will receive 3% increases in January pay envelopes, and commercial telegraphers employed by Western Union across the country are due 5¢ an hour more. This is just the beginning of a year-long pattern.

Soft coal miners will receive an 80¢-a-day increase in April. United Auto Workers members in auto, aircraft, and farm equipment industries are due 2½% raises, with a 6¢ minimum. A million steelworkers can look forward to pay boosts averaging 9.1¢ an hour in July under three-year contracts signed in mid-1956. Nonferrous miners are due raises ranging upward from 6¢, glassworkers 5¢, and many packinghouse workers 7½¢. Nearly a million railroad workers will get a 7¢ increase in November.

These and other deferred increases place a 6¢ to 8¢ "floor" under wage demands in those industries open to bargaining this year. Unions will hardly settle for less. On the contrary, they will press to push negotiated wage increases substantially higher.

• **C-of-L Argument**—The rising cost-of-living index gives them a strong argument. The government's monthly guide to consumer prices has soared to a record high of 117.8% (page 29). Workers under "escalator" contracts—including most of those covered by long-term contracts—received 6¢ in c-of-l raises in the last half-year.

United Steelworkers contracts, for instance, call for their first semi-annual c-of-l pay adjustment in January. The million workers they cover are certain to start the year off with a 3¢-an-hour raise.

Labor negotiators will press for at least 4¢ or 5¢ more than the general level of deferred wage increases due in 1957—that is, they will jack up the "floor" under wage settlements from 6¢ to 8¢ an hour to 10¢ to 13¢. If they omit fringe concessions—supplementary unemployment benefits for instance—they may insist on even higher direct cents-per-hour gains (BW-Dec.15'56, p54).

• **The 1956 Gain**—This points to a 1957 settlement range equal to that in 1956, and possibly a little higher.

According to preliminary figures, pay in manufacturing rose between 10¢ and 12¢ an hour, on the average, during the past 12 months. Because fringe concessions added to the cost of "package" settlements, the whole contract price to employers was in some instances—notably in the steel industry—about double the wage increase.

Considering only cash-in-the-pocket gains, workers who received deferred pay increases under long-term contracts in 1956 generally did not fare so well as those whose unions negotiated raises. Some discontent was quickly obvious. Protests were voiced in UAW locals,

particularly, against their "frozen" wages.

In at least two industries, employers voluntarily opened up their wage clauses to increase pay, despite long-term contracts. Douglas Aircraft gave the Machinists a new cost-of-living clause with a 4¢ wage increase, and Wyandotte Chemical Corp. gave its employees a 10¢-an-hour raise (5¢ more than the contract called for as a deferred increase) because of "higher patterns" developed in mid-1956 negotiations.

• **Pressure for More**—If negotiated wage increases in 1957 continue to go beyond the deferred raises, strong rank-and-file pressure for more money is almost certain among workers covered by long-term contracts. This could bring a revival of the "living document" theory of the United Auto Workers' president, Walter Reuther.

UAW negotiated five-year contracts in 1950 and was caught with provisions for annual 5¢ improvement-factor raises during the Korean War—when prices were inflated and other unions were scoring major gains. Reuther succeeded in splitting open the tightly closed auto contracts.

Management gave substantial concessions in 1955 and 1956 in order to get long-term agreements, hoping for stability in labor relations. It won't give in quickly to any demands for more pay. At the same time, it will have to move gingerly in handling complaints that workers with one-year contracts are faring better. If the major unions aren't satisfied, they will try to junk extended contracts in the next few years, as they run out. Employers will have to weigh concessions to their employees' discontent against the desirability of continuing contracts for two, three, or five years.

• **Beyond 1958?**—Assuming there is no big differential between the 1957 negotiated raises and the deferred increases, long-term contracts are likely to remain beyond the 1958 round of bargaining.

Should the difference widen even further than in 1956, there is far less prospect of that. Unless, that is, management is willing to pay a big price for a long-term agreement.

The bargaining dates that management should watch in 1957 are largely concerned with deferred and c-of-l raises, but some new contracts to be negotiated and a number of wage reopenings show up on BUSINESS WEEK's table of key wage dates for 1957 on pages 68-69. ➡

Industry's Important

Bargaining will be light **but**

Industry	Company or Association	Union	Employees	Contract Expires	Wage Reopening	Cost-of-Living Adjustments	Automatic or Deferred Raises
JANUARY							
Leather Products	Massachusetts Shoe Mfrs.	Shoe Workers	12,000	Dec. '57	None	None	3% Jan. 1
Communications	Western Union	Telegraphers	30,000	May '58	None	None	Ave. 5¢ Jan. 1
FEBRUARY							
Trucking	Local cartage firms in 13 Midwestern states	Teamsters	110,000	Jan. '61	In event of war	Feb., Aug.	8¢ Feb. 1
Rubber	Goodyear Tire & Rubber	Rubber Workers	24,000	Feb. '57		New contract to	be negotiated
MARCH							
Food Processing	Calif. Processors & Growers, Inc.	Teamsters	45,000	Feb. '59	None	None	5¢ Mar. 1
Chemicals	Dow Chemical Co.	UMW Dist. 50	7,300	Mar. '59	None	Feb., May, Aug., Nov.	7¢ Mar. 4
Glass	Owens-Illinois Glass	Glass Bottle Blowers	10,000	Mar. '57		New contract to	be negotiated
Oil	Atlantic Refining Co.	Independent	11,000	Mar. '57		New contract to	be negotiated
Rubber	B. F. Goodrich Co.	Rubber Workers	15,000	Mar. '57		New contract to	be negotiated
Aircraft	Douglas Aircraft, Long Beach, Calif.; Tulsa	Auto Workers	28,000	Mar. '58	None	Feb., May, Aug., Nov.	7¢ Mar. 18
Aircraft	North American, Ohio & California	Auto Workers	32,800	Mar. '58	None	Jan., Apr., July, Oct.	3% or 6¢ min. Mar. 4
Aircraft	Lockheed Aircraft, Georgia Div.	Machinists	16,400	Mar. '57		New contract to	be negotiated
Rubber	U. S. Rubber Co.	Rubber Workers	35,000	Apr. '57		New contract to	be negotiated
APRIL							
Aircraft	Douglas Aircraft, California	Machinists	32,000	Mar. '58	None	Feb., May, Aug., Nov.	7¢ Apr. 1
Coal	Bituminous	Mine Workers	200,000	60-day notice after Sep. '57	None	None	80¢ a day Apr. 1
Apparel	Clothing Manufacturers Assn. of U.S.A.	Clothing Workers	150,000	May '57		New contract to	be negotiated
MAY							
Machinery	General Motors	Electrical Workers	40,000	May '58	None	Mar., June Sep., Dec.	2½% (6¢ min.) May 29
Aircraft	Boeing, Washington	Machinists	23,000	May '58	None	None	7¢ May 22
Auto	General Motors	Auto Workers	375,000	May '58	None	Mar., June, Sep., Dec.	2½% (6¢ min.) May 29
Communications	Southern Bell	Communications Workers	54,000	May '57		New contract to	be negotiated
Retail Trade	Montgomery Ward	Teamsters	13,000	May '57		New contract to	be negotiated
JUNE							
Paper	Int. Paper Co.'s Southern Kraft Div.	AFL-CIO Unions	12,300	May '58	None	None	5% or 9¢ min. June 1
Paper	Pacific Coast Assn., Pulp & Paper Mfrs.	AFL-CIO Unions	19,000	May '60	Jun. 1 '57	None	None
Oil	Sinclair Oil Corp.	Oil Workers	10,000	June '57		New contract to	be negotiated

Wage Dates for 1957

some contracts bear watching

Industry	Company or Association	Union	Employees	Contract Expires	Wage Reopening	Cost-of-Living Adjustments	Automatic or Deferred Raises
							JUNE (contd)
Auto	Chrysler Corp.	Auto Workers	140,000	May '58	None	Mar., June, Sep., Dec.	2½¢ (6¢ min.) June 1
Auto	Ford Motor Co.	Auto Workers	140,000	June '58	None	Mar., June, Sep., Dec.	2½¢ (6¢ min.) June 1
Communications	Bell Tel. Co. of Penn.	Bro. Electrical Workers	14,400	June '57		New contract to be negotiated	

JULY

Lumber	Southern California Companies	Carpenters	10,000	June '59	None	None	10¢ July 1
Steel	Steel industry	Steelworkers	500,000	June '59	None	Jan., July	7¢-13¢ July 1
Farm Equipment	Caterpillar Tractor	Auto Workers	18,000	July '58	None	Mar., June, Sep., Dec.	6¢-7¢ July 30
Nonferrous	Anaconda Copper	Mine-Mill	8,600	June '59	None	None	6¢ plus July 1
Nonferrous	Kennecott Copper	Mine-Mill	10,000	June '59	None	None	7¢ July 1

AUGUST

Aluminum	Aluminum Co. of Am.	Steelworkers	17,400	July '59	None	Feb., Aug.	7¢ plus Aug. 1
Farm Equipment	Allis-Chalmers Mfg. Co.	Auto Workers	9,000	Aug. '58	None	Mar., June, Sep., Dec.	2½¢ (6¢ min.) Aug. 28
Farm Equipment	International Harvester	Auto Workers	40,000	July '58	None	Mar., June, Sep., Dec.	2½¢ (6¢ min.) Aug. 23
Trucking	Long Haul Truckers, N. Y.	Teamsters	7,000	July '58	None	None	12¢ Aug. 1

SEPTEMBER

Glass	Libbey-Owens-Ford	Glass	10,000	Sep. '58	None	Sep.	5¢ pay or fringes Sep. 25
Glass	Pittsburgh Plate Glass	Glass	12,000	Sep. '58	None	Sep.	5¢ pay or fringes Sep. 25
Electrical Mfg.	General Electric	Elect. Workers	83,000	Oct. '60	None	Feb., May, Aug., Nov.	3% (4½¢ min.) Sep. 15
Aircraft	Bendix Aviation	Auto Workers	16,000	Aug. '58	None	Mar., June, Sep., Dec.	2½¢ (6¢ min.) Sep. 1
Meat Packing	Armour & Co.	Packinghouse	25,000	Aug. '59	None	Jan., July	7½¢ Sep. 1
Meat Packing	Swift & Co.	Packinghouse	20,000	Aug. '59	None	Jan., July	7½¢ Sep. 1

OCTOBER

Textile	Dyers & Finishers, N. Y. and N. J.	Textile Workers	14,000	Oct. '58	None	None	6¢ Oct. 1
Container	American Can Co.	Steelworkers	20,000	Sep. '59	None	Apr., Oct.	7¢ Oct. 1
Container	Continental Can Co.	Steelworkers	17,000	June '59	None	Apr., Oct.	7¢ Oct. 1
Electrical Mfg.	Westinghouse Elect.	Elect. Workers	55,000	Oct. '60	None	Mar., June, Sep., Dec.	3% (5¢-10¢ max.) Oct. 14

NOVEMBER

Transportation	Class 1 railroads	Nonop. Unions	728,000		Closed on Pay to Nov. 59	May, Nov.	7¢ Nov. 1
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Data: Bureau of Labor Statistics.

In Labor

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Commerce & Industry Assn. Urges U.S. Stick to ILO Despite Its Faults

An employer organization has come out vigorously in support of continued U.S. participation in the International Labor Organization. The Commerce & Industry Assn. of New York last week issued a report taking issue with other employer groups that have suggested that the U.S. should get out of ILO (BW-May19'56, p169). The report marks the first time since the ILO controversy exploded a year ago that a major employer group has taken a firm stand in favor of a continued U.S. role in ILO.

While agreeing with much of the criticism directed at ILO, the association's study found that the faults of the international body weren't sufficient to justify withdrawal. In addition, the report stressed the necessity of continued ILO membership for the U.S. in order to combat the Communist influence in the organization.

The National Assn. of Manufacturers and the U.S. Chamber of Commerce have withheld final judgment on whether to continue taking a hand in ILO affairs, pending reports of a Congressional committee and a group appointed by the executive branch of government. NAM and the Chamber jointly nominate the U.S. employer delegate to ILO.

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Building Trades in New Jersey Investing to Spur Construction

Three New Jersey building trades unions last week took investment steps planned to give lagging housing starts a lift in their area. Bergen County carpenters, laborers, and masons put \$50,000 each from their welfare funds into a \$150,000 mortgage buying fund.

The move followed closely after an announcement that the Federal Housing Administration had certified the International Brotherhood of Electrical Workers as a prime mortgagee (BW-Dec.15'56,p53).

The Home Builders Assn. of Northern New Jersey is reported negotiating with seven other unions. The Association's goal is \$1.5-million for home mortgages.

. . .

Machinists Union Sues IUE for \$1-million Over Charge It Hired Communists

A million-dollar lawsuit filed by the International Assn. of Machinists against the International Union of Electrical Workers alleges IUE libeled the Machinists in leaflets that charged the latter had Communists on its payroll.

The action stems from rivalry between the two unions

over locals of the leftwing United Electrical Workers, now splitting apart in a number of districts.

The IUE "Communist" allegation was based on Machinists staff assignments given former UE people. IAM subsequently dismissed or refused to admit to membership 10 one-time UE staffers named in charges by IUE and other former CIO unions.

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Labor Dept. Comes to Aid of Oldsters With Data on Work Efficiency

The Labor Dept., campaigning for a better break for the older worker, has come up with new data to challenge the most stubbornly held argument against hiring oldsters—that work efficiency declines with age.

A Bureau of Labor Statistics pilot study of age and on-the-job performance discloses:

- "Output per manhour of both men and women piece workers showed only a slight variation up to age 54 and in no group did the average performance of workers 55 through 64 fall below 90% of the group aged 35-44."

- "Measurement of the output per manhour of individuals showed that variations in the output of persons in the same age group were very large—generally larger than between age groups."

These results, now being tested in a more extensive survey, "have important implications for employment policy," Asst. Secy. of Labor Rocco Siciliano told a Congressional joint subcommittee looking into the pace and impact of industry's conversion to automation. "Workers displaced by technological developments should be selected for retraining on the basis of individual ability and not simply chronological age," Siciliano said.

The study also showed that older workers generally do not find age a barrier to coverage under health insurance plans. However, new employees in the older age groups often are barred from pension plans.

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Unions Give Important Help To Fund-Raising for Charity

United Fund and Community Chest drives are getting important aid from unions. AFL-CIO has men working in United Community Campaign national headquarters and with drive officials at the city level all over the country. Though final contribution figures aren't all in, it's clear that this help is paying off.

In Akron, the United Rubber Workers reported its members in rubber plants gave an average \$17.11. Rubber companies and their employees contributed 56.8% of the city's total pledge funds. In Detroit, workers' donations at Ford averaged \$18.89, and at GM \$18.94. Hourly-rated employees of Great Lakes Tractor gave \$23.26 apiece.

In the Cleveland Community Chest drive, Jack & Heintz, Inc., hourly workers gave an average \$10.70, Alcoa's \$12.08, Republic Steel's \$14.53, and Warner & Swasey's \$11.16.

Nationally, United Community Campaign officials expect that hourly workers will contribute about one-third of the \$320-million that will be raised.



On this Ellenville street, second building on left houses a discredited bank that is reopening as a new institution with a clean slate. It's an example of what happens . . .

When a Bank Closes Its Doors

Ellenville, N. Y., won't forget this Christmas for a long time.

For many of the 4,500 residents of the resort village deep in a valley of the Catskills, the holiday season was marked by fear of economic distress—and in some cases, ruin.

Everywhere along the gaily decorated shopping streets, merchants reported sales down one-third, one-half, even three-quarters below last year. In store after store, retailers stared out at empty streets from behind counters heavily stocked with gifts. Few people in Ellenville this year had cash for anything but daily necessities.

What occurred there early this month doesn't happen very often any more. But when it does, as Ellenville found out, it can cause chaos.

I. Crisis in Ellenville

It all began late Thursday, Nov. 29. Examiners, making a surprise audit of the books of the Home National Bank of Ellenville, discovered a shortage of approximately \$580,000. On Friday, William R. Rose, 51, the bank's president, was arrested and charged with

altering bank records, a federal offense.

Rose was extremely well liked in the community. Since 1940, when he took over the presidency of the bank his grandfather founded, he had followed an amazingly liberal credit policy.

At one time, it is reported, loans amounted to 90% of deposits. According to the Home National's last statement in September, it had a capitalization of \$807,000, liquid assets of \$787,000 and deposits totaling \$7,263,000. When the shortage was discovered installment loans amounted to almost \$3-million and a majority of the people in town were indebted to the bank.

• **Demonstration of Faith**—No sooner was Rose arrested than Ellenville began flocking to his defense. By the following Monday, 3,000 people had signed petitions pledging aid. And instead of the anticipated run on the bank, residents and businesses actually poured in money to demonstrate their faith and help the Home National.

Then, late Monday night the roof fell in. Examiners, continuing their search, discovered the shortage actually totaled nearly \$1.3-million. They re-

ported that approximately \$900,000 apparently had been placed in the account of Anjopa Board & Paper Mfg. Co. to cover alleged overdrawing, and \$250,000 in the account of the Zeiger Hotel. Still another \$150,000 or so apparently had been used to cover smaller loans that had not been repaid.

• **The Doors Close**—Following this discovery, the bank was closed. From Tuesday, Dec. 4, until Friday, Dec. 21, depositors were unable to get their money. Many of the townspeople were unable to cash the Christmas club checks they had only recently received. Businessmen discovered they were unable to pay their bills and were in danger of losing important discounts for prompt payment. And nearly everyone got back checks for payment made out just before the bank closed.

More important, perhaps, merchants, anticipating the "biggest Christmas ever," had built up big inventories, in many cases using borrowed money to do so. Now they were in trouble.

The people of Ellenville were demoralized and frightened.

• **FDIC Steps In**—Deposits up to \$10,000 in the Home National Bank were

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insured by the Federal Deposit Insurance Corp., of course. And the government agency began almost immediately to make plans for seeing that these were paid off.

But it wasn't the fear of not getting the money that alarmed Ellenville. It was the fear of getting it. If the FDIC paid off, the bank would be liquidated. And that would mean most of the villagers would have to find new lines of credit.

Ellenville has another commercial bank, but because its lending policies were conservative compared with the Home National, most of the town did its business with Rose.

• **Effects of Liquidation**—Many of the Home National's depositors had more than \$10,000 in the bank. In liquidation, they would get their \$10,000 promptly enough but they might have to wait years to get back the excess. And even then they probably wouldn't receive 100 cents on the dollar.

Perhaps most important of all, liquidation of the Home National would require the government to apply a customer's loan against his deposit and pay only the balance. And in many cases loans exceeded deposits. That would mean FDIC would ask for the sum owed immediately, even though the loan might not be due for some months.

Many of Ellenville's 135 or so merchants in this predicament were unable to sell off their Christmas inventories. So having to pay off their loans in advance would have worked a tremendous hardship, and possibly forced some of them under.

• **The Way Out**—It was to try to avoid these eventualities that a committee of 15 businessmen set to work to form a new bank. The FDIC agreed to hold off paying—providing the committee hurried.

As the plan has been worked out, Ellenville has a new bank doing business in the same building as the Home National. The new bank, The Ellenville National, has assumed all the deposits of the old one and all the "acceptable assets" or collectable loans. In addition, it has a capitalization of \$1,050,000, a figure arrived at by the FDIC.

The new capital, made up of stock priced at \$52.50 a share, was raised by the committee almost entirely among local people. They dug deep into reserves and savings to do it.

• **Clean Slate**—FDIC is taking over the old bank's unacceptable assets, and is, in effect, paying the new bank the difference between the acceptable assets and the deposits. In other words, the new bank is starting out with a clean slate and a larger capitalization than the old one.

FDIC will now attempt to recover

the unacceptable assets or bad debts. Everything it recovers up to the amount it paid the new bank, it will use to reimburse itself. Anything collected in excess will be used to pay the stockholders of the old Home National.

II. Federal Insurance System

Ellenville's experience brings into the spotlight a government agency most people know very little about. The Federal Deposit Insurance Corp. was set up by Congress as a direct result of the banking crisis of 1933.

• **The Setup**—FDIC is run by a three-man board of directors appointed by the White House. One member is always the Comptroller of Currency, now Ray M. Gidney. Other members are H. Earl Cook, chairman, and Maple T. Hart.

The agency has 12 regional offices, each presided over by supervising examiners. Most of the 1,100 employees working for FDIC are bank examiners.

Today about 94% of the country's banks participate in the federal insurance program. At the end of 1955, 55% of their deposits were insured.

Since 1933, FDIC has paid out \$337-million to protect depositors. The agency says about nine-tenths of its disbursements have been recovered through liquidation of assets taken over from banks in distress.

• **Balance Sheet**—Money for the insurance fund comes from annual assessments—one-twelfth of 1% of the deposits of insured banks. On balance, FDIC has turned a profit. Prior to 1950, all income after expenses and losses went to the insurance fund. In 1950, Congress revised the law to provide insured banks with a credit against future assessments. These banks split 60% of FDIC's profit—the difference between assessments for the year and insurance losses and operating expenses.

By mid-1956, FDIC was able to show a net cumulative "income" of \$1.69-billion since its inception. This money is called the deposit insurance fund and is invested in U.S. government securities.

• **Supervision**—FDIC has no authority over chartering banks, but the Comptroller of Currency does refer applications for national bank charters to FDIC for advisory opinions. And most state authorities decline to issue state bank charters to institutions that can't qualify for federal deposit insurance.

In addition, FDIC can terminate the insured status for any bank persistently engaging in what it considers unsafe or unsound practices or for violations of banking laws. It also has the right to disapprove the merger of an insured bank with a non-insured bank. This supervisory authority puts FDIC

in a position to promote better banking practices.

• **Examination of Records**—FDIC also has stimulated close cooperation among various banking agencies responsible for the vital task of examining bank records.

The authority is divided this way:

• National banks are examined by the Comptroller of Currency.

• State banks that are members of the Federal Reserve System are examined by the Federal Reserve.

• Insured state banks not members of the Fed are examined by the Federal Deposit Insurance Corp.

Since 1938, the three federal agencies and more than half of the states have used virtually a uniform report of examination. By law, FDIC has authority to make special examinations of any insured bank, but the authority is exercised only rarely. The agency, instead, relies heavily on examinations made by other federal agencies in appraising its insurance risks.

III. FDIC's Prime Role

FDIC's basic function is, of course, the protection of depositors. Once an insured bank gets into distress, the agency may take one of three courses:

• **Decide** the bank should be liquidated, and pay off depositors up to the guaranteed maximum of \$10,000—in cash or in deposit slips acceptable in other insured banks.

• **Facilitate** absorption of the distressed bank by another insured bank (which can be either a going concern or a successor institution).

• **Advance** funds to the distressed bank if it decides this will save the institution and maintain necessary banking service for a given community. This authority has never been put to use.

• **Absorption**—The absorption process, now going on in Ellenville, is probably the preferable one. In this situation the agency puts up cash to the replacement bank—enough to make up the difference between the bank's sound assets and the liabilities that are to be transferred.

This is the choice, generally, when the extent of a shortage can be fairly well ascertained and when FDIC figures its potential loss will ultimately be smaller.

Royal Coburn, FDIC's general counsel, points out that this process gives full protection to "excess depositors"—those whose deposits top \$10,000.

The assuming bank has its choice of assets from the floundering bank. Once it makes the choice and the transfer is made, FDIC's responsibility for the value of those assets ends.

An FDIC spokesman says government obligations, prime mortgages, and municipals are the "usual assets that any assuming bank takes." But it may

—as at Ellenville, for example—also take over the building and equipment.

FDIC is usually left with non-bankable or otherwise undesirable "assets" such as overdrafts, doubtful mortgages, or installment loans that look suspect.

• **Debt Settlement**—Debtors of a bank that is absorbed must settle with FDIC if their paper is not transferred to the successor. At Ellenville, the agency is putting liens on property of the two business firms that had sizable overdrafts. What this will lead to is still a matter of speculation.

A spokesman explains FDIC's role this way: "We might foreclose a lien, take over a property and make the best recovery possible by either auctioning it or negotiating a sale. We are not interested in going into the business of running, say, a hardware store or a manufacturing company."

Stockholders of a distressed bank are the last to make any recovery. In most cases, they never get back any money. In Ellenville, Coburn is fairly optimistic that there may be some ultimate payment for them. But that depends on how successfully FDIC can liquidate the assets it takes over. And, even then, FDIC must be fully reimbursed from the proceeds of liquidation for the cash it has laid out (and it charges 4% interest) before stockholders can get a penny.

• **Complete Liquidation**—When the distressed bank is liquidated, FDIC takes possession of everything, right down to the paperweights on the desks and the paper clips in the stockroom. Complete liquidation is applied most frequently when deposit ledger sheets have been tampered with or destroyed or falsified mortgages make it impossible to determine within a reasonable time what the FDIC's loss is going to be.

Two things happen when this process is set in motion:

• A payoff crew is installed in the bank's quarters, to verify depositor claims and settle them in full up to \$10,000. This crew can generally finish its work within six to eight weeks.

• A liquidation crew goes to work simultaneously, cataloguing the assets and remaining on the case (often for years) until they are disposed of to FDIC's best advantage.

Once the liquidation is finished—FDIC may make some adjustments. If FDIC has fully recovered its own costs through the liquidating, it begins to take care of excess depositors. They may make full recovery—if the liquidation has produced enough money. Otherwise, they share in the recovery on a pro rata basis. And if the liquidation is an overwhelming success—producing not only enough to pay off FDIC and excess depositors in full—then are stockholders of the defunct bank given a share in whatever is left over. **END**

In Finance

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New Financing Figures to Maintain Fast Pace in First Quarter, or Longer

Signs point to a whopping first quarter of new financing in 1957—and maybe longer. Over \$1.5-billion is already scheduled, and announcements of proposed issues are flooding in faster than ticket orders for the Rose Bowl.

Aluminum Co. of America (\$125-million of bonds), Phillips Petroleum (\$171-million of convertible debentures offered to stockholders), and Armco Steel (\$65-million of new common stock to be offered to stockholders) were among the earlier starters (BW—Dec. 22 '56, p. 73). Add to these American Telephone & Telegraph (\$250-million of bonds), Sears, Roebuck Acceptance Corp. (\$50-million of bonds), Columbus & Southern Ohio Electric (\$16-million bond issue), Riegel Textile (\$12-million bond issue), Daystrom, Inc. (\$8-million of convertible debentures), Interstate Oil Pipe Line (\$25-million bond issue), Oklahoma Gas & Electric (\$20-million bond issue), Macy's (\$25-million of convertible debentures to be offered to stockholders at different times in two chunks of about equal size).

Besides these contemplated public offerings, some private placements were announced last week that will figure in next year's totals because some or all of the funds involved will be drawn down in 1957. Crown Zellerbach arranged a \$60-million direct placement with 11 institutions for 25-year promissory notes bearing 4½% interest. Braniff Airways' stockholders O.K.'d a \$40-million, 4½% equipment mortgage bond issue as part of an \$83-million expansion program. The bonds are to be sold as funds are needed to a group of institutions. Magnavox Co. has arranged a \$6-million loan with two insurance companies at 4½%, the funds to be available early in February.

There's little doubt that the planned volume of new financing will maintain the current pressure on the long-term sector of the new money market (page 96).

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Earnings of Young's New York Central Sag to Point Near That of Old Regime

The New York Central's earnings for 1956, after an early spurt, are sagging back to a point little better than in 1953. That was the last full year in which the East's second largest carrier was run by William White, who quit as president when the Robert R. Young interests took control in the spring of 1954.

Alfred E. Perlman, who succeeded White as president, said last week that the Central's 1956 earnings are unlikely to top \$5.50 a share; in White's last year, the figure was \$5.27. What's more, the 1956 estimate is almost a third lower than the \$8.03 that the new management rang up in 1955.

The shrinkage of profits is blamed on the loss of

traffic due to last summer's steel strike and on higher costs of labor and materials. The 6% freight rate boost granted early in March was not enough to offset these debilitating factors. Indeed, Perlman indicated that even the additional 7% boost just O.K.'d by the Interstate Commerce Commission would not be enough. He said that on the basis of 1956 traffic this would increase revenues between \$30-million and \$33-million. But this, he added, would merely balance higher labor costs and leave the company holding a \$10-million bag on higher material costs.

• • •

Deep South Banks in Surprise Move Lead Parade to Higher Interest on Savings

The quickest reaction to the Federal Reserve Board's announcement that commercial banks could now pay as much as 3% on savings deposits has occurred, unexpectedly, in the deep South. A few weeks ago, the Fed, responding to a request from a few major New York banks, upped the maximum interest rates payable on savings deposits to 3%, in an effort to make commercial bank savings rates more competitive with rates paid by savings banks and savings and loan associations.

In New York, the Chase Manhattan, the city's largest, has been the only bank so far to announce it would pay the higher rates. In many other cities, bankers expressed an unwillingness to raise rates at all, much less to the top 3% rate, when most are paying only 2% or less (BW—Dec. 15 '56, p. 143).

Last week, however, the Fed's action brought a rapid fire of savings rate boosts in both Georgia and Florida. In Atlanta, the First National and the Fulton National joined three smaller banks in making the 3% rate effective as of Jan. 1. The Citizens & Southern, Atlanta's largest bank, will pay 3% on savings certificates while sticking to its 2½% rate on regular savings accounts.

In Florida, the move to 3% was spectacular because it started for most banks from 1%, and rose in two fast jumps. Jacksonville has been the focus for the rate hikes, which have already taken on the semblance of an incipient rate war. There three banks announced early this month that they would pay 2½% instead of the current 1% on savings. Then one of the three, the Florida National, suddenly made another jump, to 3%, catching the others off balance. The others plan now to meet the raise.

In Miami, the Florida National Bank & Trust has announced it will pay 3%—it now pays 2½%—and 23 other banks in the Florida National chain are expected to jump to 3% soon.

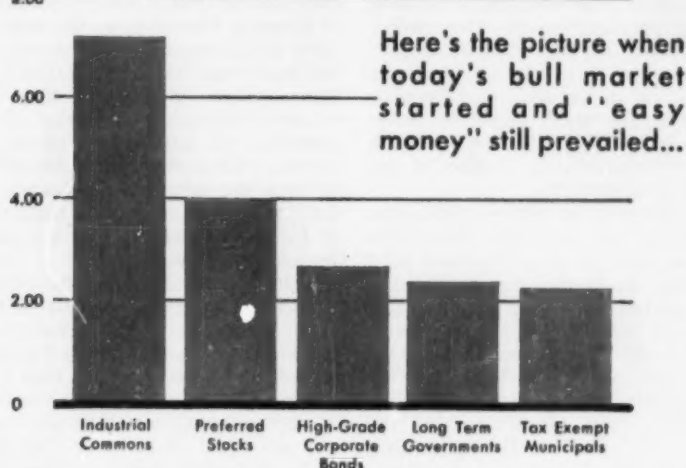
While Florida banks battle with tight money, the state's Gov. Leroy Collins last week made a plea to bring the federal government into the state's own tight money problems. Collins asked for a federal agency that would buy municipal bonds at interest rates no higher than 3½%. "I think it imperative that the federal government be of practical assistance to the states in this tight money crisis," he added.

Collins claims that high interest rates are responsible for the delaying of "millions of dollars" of Florida bonds. The biggest single Florida issue that is currently held up is the \$185-million Sunshine Parkway issue.

THE MARKETS

How Sharply the Security — Yield Pattern has Changed

Yields in Percent, June 1949



Yields in Percent, Mid-December 1956



Data: Standard & Poor's Corp.

The Yield Gap Narrows

When Merrill Lynch, Pierce, Fenner & Beane, the nation's biggest brokerage house, announced that a poll of its offices had revealed "tight money" as the No. 1 business news story of the year, no one was very surprised.

All year, tight money has been cited as one important reason for the stock market's lackluster performance. And, of course, it is behind the steep slump in bond prices. But bond prices have dropped much farther than prices of stocks, and consequently yields on bonds have moved closer to stock yields than at any time since the bull market got under way back in 1949. Since

June, 1949, in fact, the yield relationship between stocks and bonds has altered radically (chart). Then, industrial commons were yielding 7.19%, and preferreds 3.97%. High-grade corporate bonds afforded an average return of 2.69%.

Now, industrial commons are yielding just what they did a year ago, but yields on preferreds are up from 4.07% to 4.65%, and high-grade corporate bonds are returning 3.78% compared to 3.20% a year ago. The rise in long-term government bond yields (from 2.90% to 3.35%); and tax-exempts (2.72% to 3.45%) has been sharp, too.

Wall St. Talks ...

... about 1957 outlook ... cost of advertising ... home building ... reported merger plans.

The 1957 outlook, according to Walter E. Hoadley, Jr., economist and treasurer of Armstrong Cork Co.: Because of "continued inflationary tendencies, sparked by strong demands for consumer and industrial goods, plus rising wage costs and expanding defense and other government expenditures," money and credit will stay tight "for most if not all" next year and consumer income should rise "at least another 5%."

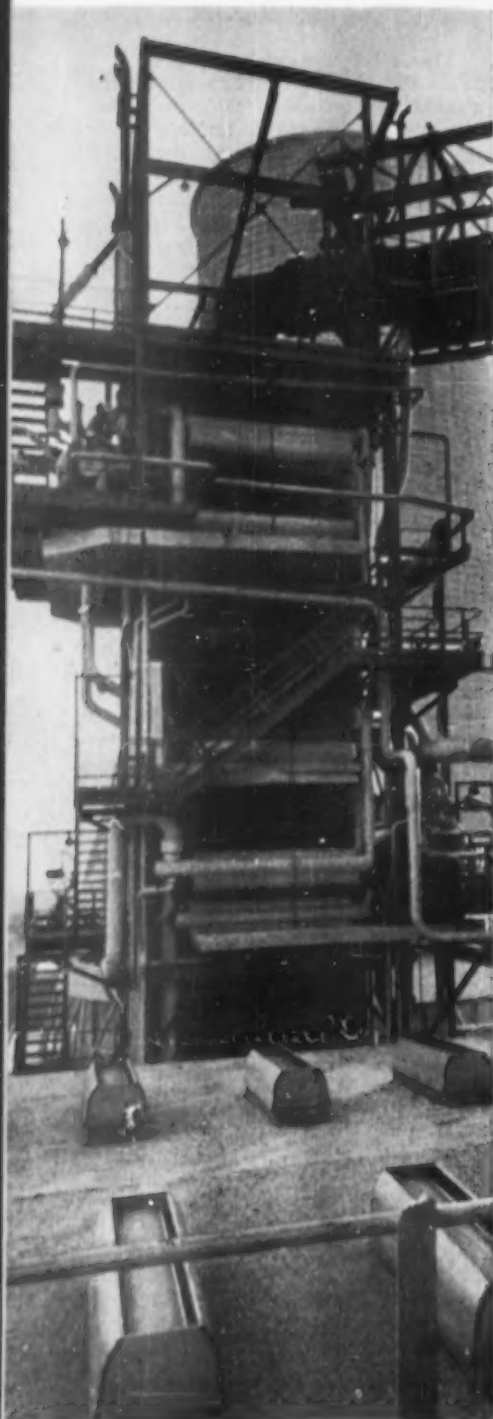
The per-share cost of advertising: One Streeter, intrigued by an Advertising Age survey of this year's 100 biggest advertisers, roughly figures that General Motors 1956 ad expenditures totaled some 30¢ a share, compared with this year's \$2 dividend; Procter & Gamble, spent \$2.10 for advertising vs. its \$1.90 stockholders payout; General Foods, \$3.05 vs. \$1.48; Ford Motor, 65¢ vs. \$2.40; Chrysler Corp., \$3.75 vs. \$3.

Money market miscellany: High-grade corporate bond yields are now at their highest level since January 1935, according to Standard & Poor's Corp. indexes. ... Municipal bond prices continued to show a firmer tone last week. But dealers are still edgy. The reason: The flood of new offerings that appears ahead. Pressure from the latter, they say, could start prices slipping again.

One-million to 1.1-million new homes will be built next year, predicts Norman Strunk, executive vice president of the U.S. Savings & Loan League. But he sees inflation as a threat to builders. The recent increased cost of steel, he says, is only now beginning to show up in home-building costs. "Increases also are likely to come along on other products as the effect of new wage agreements is felt in other industries," Strunk predicts.

Latest merger gossip: Joy Mfg. Co., leading producer of mechanized mining equipment, has been holding "informal" merger talks with Cooper-Bessemer Corp., which makes diesel engines and compressors. ... A. M. Byers Co., wrought iron and plastic pipe maker controlled by General Tire & Rubber Co., has been approached by several companies interested in acquiring it through purchase or merger.

Fuel Shortage Sparks West



IN BRITAIN Calder Hall is producing electricity at the first large industrial nuclear power plant.

THIS WEEK Western Europe, suffering from a fuel shortage, is thinking, talking, planning atomic energy utilization. What had been a highly theoretical prospect of converting from coal and oil to atomic power as the main source of the area's industrial energy (BW-Mar.17'56,p140) has suddenly—with the Suez crisis—become a very practical consideration.

Europeans of all political persuasion are telling each other that their industrial machine and their livelihood must no longer be at the mercy of Middle East politics. But the mechanics of switching from coal and oil to atomic power as the main source of European energy aren't so easy as the decision.

Despite a rapidly growing program in Britain (BW-Oct.27'56,p126) and widespread plans on the Continent, Western Europe is still at least a decade away from having atomic power in quantities that can power its industry. There are major obstacles that prevent present programs for nuclear power development from being expanded quickly. Shortages of investment capital, materials, and technicians; technology that is still in its infancy; lack of international organization to promote cooperation for more rapid growth—all these limit the rate of progress.

• **Tie-in Plans**—It's the problem of international organization that the West Europeans hope to get out of the way quickly. In one country at least—Germany—it's holding up the national program. And all Europeans agree that a plan that would tie their efforts together would boost the progress of the whole area in moving into the nuclear power age.

The problem of the moment is how this intra-European atomic cooperation is to be organized. An International Atomic Agency has been set up at the U.N. to handle world problems—mainly the transfer of technology from the U.S. to underdeveloped countries. But besides that, two alternate proposals are being made specifically to harness regional cooperation in Western Europe:

• The Europeanists, those who advocate rapid Western European economic integration, want a relatively tightly organized supra-national agency—modeled after and allied with the European Coal & Steel Community.

• Many of Europe's industrialists want cooperation channeled through a looser international organization to be handled as a part of the Organization for European Economic Cooperation

(OEEC), the European central office of the Marshall Plan.

• **Euratom Plan**—During the next few days, the Europeanists plan to turn on the heat to get their plan—called Euratom—approved. By Jan. 15, they hope to draft a Euratom treaty that can be submitted to the assembly of the six-nations. Then they hope to ram it through the individual parliaments before spring—capitalizing on the feeling of European solidarity that has grown up since the Suez crisis.

Whether the Europeanists are able to get their atomic program through could become a crucial factor in the future of the whole Western European union movement. It's true that Euratom isn't so important as the Common Market proposal, which is also being put into final shape (BW-Oct.20'56 p23). But most observers believe that a strong Euratom could make a vast difference in moving Europe toward new energy patterns. And that, in turn, could decide the future of Western Europe as an importer of raw materials and as a manufacturer of finished products.

• **Big Stakes**—The U.S. stake in Western Europe's decision is part political, part commercial. A Western Europe, armed with a rapidly expanding atomic power program, would be better able to fend off Soviet aggression. Furthermore, it could be a market for U.S. atomic equipment.

I. National Programs

There's no doubt about who's leading in Western Europe in developing atomic energy. It's Britain.

The British already have a 12-station atomic power plan started. And sometime next month, London is likely to announce its stepped-up goals over those set in a February, 1955, White Paper. The British think that new technology can boost the power of the plants already mapped out (BW-Oct.27'56, p126), and that these plants can be built in 12 months instead of 18.

Soon after the New Year, the British will start work on the largest nuclear power project yet announced. It's a 360,000-kw. plant for the Glasgow, Scotland, area.

• **Shortages**—The reason this speed-up program isn't more spectacular is clear. Britain hasn't the steel, capital, or the technicians to go faster. Technician-shortage especially is a problem all over Europe. Last September, OEEC re-

Europe's Atomic Energy Plans

ported that, although nuclear development was absorbing 20% of the young scientists being graduated from Western European universities, that would be only a third of the number needed. There are 5,000 nuclear scientists in the U.K. compared with 15,000 in the U.S., and only about 1,500 in France.

- **Capital Problem**—The obstacle set up by the investment requirement of the European atomic energy program is dramatized by one estimate of a U.S. observer: It would cost more to build a gaseous diffusion plant to serve all Western Europe than any one country thus far has invested in its whole program. Such a plant is needed if the Europeans are ever to build reactors using enriched uranium and not have to depend solely on the U.S. supplying fuel.

You can see the problem these investment requirements pose in France where the government is busy putting together its Second Five-Year Atomic Plan. But the plan is still in the drafting stage, begins officially the end of next year, and critics are saying its contemplated budget of between \$500-million and \$1-billion isn't large enough. France's big government-owned utility, Electricite de France (EDF), has broken ground for the first nuclear power station which according to plan will go into operation in 1959. After it gets under way, EDF plans to start another plant every 18 months to produce 8-million kw. of "atomic electricity" by 1976.

France's neighbor, Belgium, has a unique role in European atomic development because of its vast uranium deposits in the Belgian Congo. Still the Belgians have purchased only a 10,000-kw. demonstration power reactor in the U.S., which will be installed in 1959. The plant was bought from Westinghouse by a group of eight large Belgian industrial firms. The government is also planning a 100,000-kw. industrial power reactor on which it hopes to start construction in 1962.

The Italians are formally committed to buy a 10,000-kw. demonstration power reactor for the Fiat Company. They also have plans for two or three other power reactors, claim their country will need 1-million kw. of nuclear power capacity by 1965.

- **Late Entry**—Germany was freed of Allied restrictions on the peaceful use of atomic energy only in May, 1955. But the West German program is stymied by the lack of a fundamental

law governing atomic energy due to a hassle between government and industry on how the national and international programs should be handled. Bonn experts feel the law may go through before elections early next summer. Meanwhile, German procurement of power reactors in the U.S. is held up by another difficulty: So far, a bilateral agreement on power reactors has not been negotiated between Washington and Bonn.

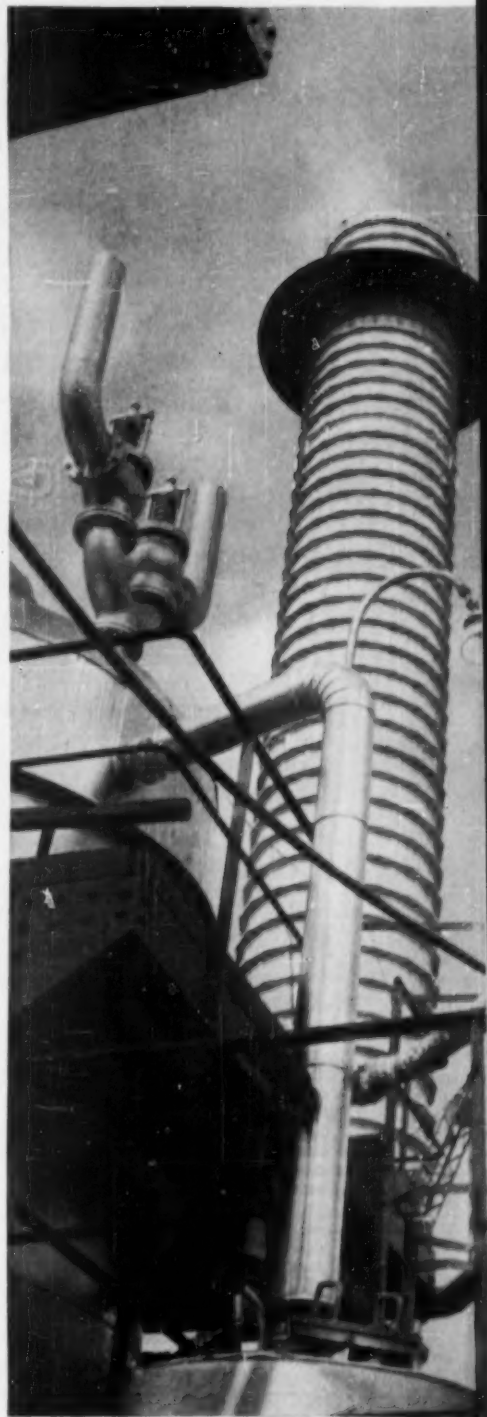
II. OEEC vs. Euratom

It is from Germany and from Britain that the strongest opposition to Euratom has come. German industrialists fear the supra-national aspects of the scheme, believe they could do better on their own working through bilaterals with U.S. and British industry. They also believe they can manage the capital requirements of an atomic program without throwing in their lot with other Europeans. The British, with their head start, believe exchanges and co-operative investment with the Continent would only retard their program.

- **Similarities**—The two plans of European nuclear development cooperation on a regional basis—Euratom and the OEEC plan—are not necessarily opposed. It is certainly conceivable that Euratom might grow out of the six-nation Coal & Steel Community with Britain, the U.S., and other European powers cooperating with the same countries in a more loosely organized OEEC plan. That seems to be precisely the approach the British are taking now. But on the Continent, the OEEC plan has been seized on by the opponents of Euratom as a substitute.

In many essentials the two plans are the same. Both envisage public and private joint undertakings, exchange and pooling of technical knowledge, coordination of national programs to avoid duplication, and assurance of few atomic equipment trade barriers.

But their approach is quite different. The OEEC plan foresees no over-all budget; investment would be a national affair except on specific cooperative projects. Euratom would set an amount for each of the six nations to contribute each year—probably 20% of their total expenditure for nuclear development. OEEC would leave the question of fuel procurement to the individual nations; Euratom would have a virtual monopoly. (This upsets the Belgians who have their own resources, the



IN FRANCE atomic power is passing from the laboratory to limited industrial use.



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British who buy from them on long-term contracts, and the French who do not like the original Euratom ban on anything but peaceful use of all fissionable material.)

• **On Sidelines**—U.S. policy is to stay clear of the Euratom vs. OEEC fight. The reason: Washington learned its lesson when we strongly backed the European Defense Community and it lost out in the French assembly.

That could happen again today with Euratom. Even in France where the Europeanists led by Jean Monnet are the most powerful, there is opposition to Euratom's supra-national character.

Still, the U.S. has made it clear that it backs European atomic power development integration, would like to see Euratom go through as the plan likely to produce the most results fastest. The West Germans believe the reason their bilateral agreement on power reactors hasn't gone through is that Washington is dragging its heels, waiting for Bonn to enter Euratom.

III. Race for the Market

While U.S. policymakers are keeping a watchful eye on the development of the European organization, U.S. manufacturers are scanning the market for possible customers. So far, they have it all to themselves.

Theoretically, the British ought to be competing with American nuclear equipment producers. The British have three advantages: They are producing reactors fueled with natural uranium—rather than enriched uranium. And enriched uranium is scarce in Europe. The U. K. reactors are also simpler in design, easier to build. And the British program—which U. K. spokesmen call the most advanced in the world—has given their salesmen experience in operating and construction that American companies don't yet have.

• **Reactor Market**—Still, it's the U.S. that is likely to do most of the selling of reactors to the smaller European countries, perhaps even to France. Our reactors—using enriched uranium fuel—are more efficient. Furthermore, we have practically guaranteed to furnish fuel stocks when we sell a reactor. U.S. manufacturers are also counting on the British domestic demand being greater than U. K. equipment manufacturers will be able to meet.

The announcement this month that the Atomic Energy Commission will declassify a lot more data on reactor designs, fuel fabrication and processing, and metallurgical techniques brings the day closer when this kind of overseas business can begin in a big way. Until now, AEC secrecy often made it virtually impossible to talk to a potential foreign customer about the kind of reactor he might want to buy. **END**

North Africa Banks on U. S. Aid

Morocco and Tunisia, which gained political independence from France earlier this year, now need help to make up for dwindling French aid. They expect that help to come from the U.S., whose world prestige has soared since the Suez crisis.

In Casablanca's slums alone (picture), you can see why the two North African countries desperately need outside help. Both countries are in bad economic shape. Tunisia is struggling with heavy unemployment and huge population increases. Morocco, even worse off, is paring government expenditures to the bone and calling for austerity to prevent economic collapse.

Survey teams from the International Cooperation Administration have been studying the economic problems of the two countries during the past month. By mid-January they should have a preliminary report ready. Meanwhile, officials hope the U.S. will start at least a small economic aid program—until Congress can deal with a larger program to be included in next year's foreign aid bill.

• **Upset**—When the two countries were protectorates, France put about \$75-million yearly into Tunisia, nearly \$200-million yearly into Morocco. This was for budgetary support and economic development. Even after independence, the countries continued to lean on France for economic help. But France's kidnapping of the Algerian rebel leaders in October upset economic—and diplomatic—relations with the North Africans. Then the Suez crisis threw a body blow at France's own economy, weakening its ability to provide economic aid.

That was the background for the recent visit to the U.S. of Habib Bourguiba, Premier of Tunisia, and Ahmed Balafrej, Morocco's foreign secretary. Bourguiba was looking for some \$150-million; Balafrej, much more than that. Neither will get anywhere near the amount they would like—at least, in the months ahead. But Morocco, because of its mineral resources and the five U.S. air bases there, will undoubtedly get the lion's share.

Bourguiba, for one, did impress on Washington the fact that in North Africa there's strong pro-Western feeling that has little sympathy for Col. Nasser's game. In fact, U.S. prestige there—much to France's consternation—has soared because of our independent stand in the U.N. on the Suez issue.

• **Unpopular**—France won't look too kindly on U.S. support for Morocco and Tunisia—if it's on a large scale. For one thing, closer ties between the U.S. and the two countries will undoubtedly spur France to new accusations of U.S.



“interference” in its settling of the Algerian question. For another, many Frenchmen think the U.S. wants to move in on the reportedly rich oil properties in the Sahara. Even so, high French officials during the past month have become resigned to some U.S. aid for Morocco and Tunisia.

Washington's feeling is that U.S. aid should supplement, not supplant, France's traditional aid to North Africa.

• **Mediator's Role**—This approach may be a disappointment to many anti-French Arabs who now see the U.S. as their white hope. But Washington thinks that in North Africa—as well as elsewhere in the world—the U.S. should assume more and more the role of mediator. France can't afford to lose its long-standing economic interests in North Africa (though severance of poli-

tical ties is another matter). Likewise, France—in Washington's view—is better placed to help North Africa evolve economically, once it erases the stigma of colonialism. And Washington is reluctant to get caught in any political crossfire between the French and North Africans.

Thus, by withholding massive aid, Washington hopes to encourage the two countries to turn back gradually to France for help. What aid the U.S. does give at first will be largely technical assistance. With French administrators and businessmen moving out, both countries have to be trained in running their own affairs. U.S. officials also hope that private American investors, already welcomed by the North Africans, will begin putting more money into the countries. **END**

In Business Abroad

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Snags Feared for U.S. Economic Policy Under Japan's New Government

Informed sources in Tokyo are predicting that the new Japanese government may test U. S. economic policies in the Orient. This week's election of a new prime minister, Tanzan Ishibashi, is interpreted as a victory for the forces of economic nationalism.

Ishibashi is expected to push determinedly for a further liberalization of the West's trade embargo against Communist China. And he's likely to take a tougher line in the negotiations with the U. S. over Japanese government quotas slapped on manufacturers exporting cotton textiles to the U. S.

Ishibashi may try to take retaliatory steps if agreement isn't reached soon in current negotiations under way in Tokyo. That might take the form of Japanese cutbacks of raw cotton purchases in the U. S. in favor of other suppliers—probably Mexico. Ishibashi is known to favor some new formula on quotas, on a ratio to U. S. agricultural produce and fuel sold in Japan.

American investors who would like to get a crack at Japan's expanding industry will get no encouragement. Ishibashi is known to favor the present stiff restrictions against foreign investment in Japanese industry.

At home, Ishibashi will continue the economic policies of the former Democratic-Liberal governments. He dares not do otherwise since it would split the party, help the growing Socialist opposition. However, he is likely to take a less conservative view of the economy—press for swift modernization of Japanese industry without much regard for the question of balancing the government budget.

. . .

Steel Companies From Western Europe Forge Many New Links in Canada

Western European steel companies are setting up shop in Canada in a big way. Some recent developments:

- A French group tied in with Banque Union Européenne, Paris, may build a \$5-million steel mill in the Canadian Rockies where open-pit iron ore deposits exist. The French group is working in partnership with West Canadian Collieries, a British-owned company, and West Canadian Petroleum Ltd., Calgary.

- West Germany's Hoersch Werke AG is stepping up construction of a \$3-million steel pipe mill near Regina—after assurances of a fast cost write-off by the Saskatchewan government.

- Mannesman AG recently moved its Western Hemisphere headquarters from New York to Toronto, announced it would put \$30-million into Canadian expansion. Mannesman's tube plant at Sault Ste. Marie is now in full production.

- The Port Moody (British Columbia) plant of Canadian Western Pipe Mills Ltd., wholly owned subsidiary of Phoenix-Rheinrohr AG, is now producing at capacity

output. Phoenix-Rheinrohr just opened its other Canadian company—Alberta Phoenix Tube & Pipe Ltd., Calgary (Alberta).

Behind this European interest is not only Canada's fast-moving capital expansion, but also its booming iron and steel output. This year's new record of 21-million tons shipped to domestic and U. S. mills is 44% above 1955. Iron Ore Co. of Canada, the leading producer, has boosted output this year from 7.7-million tons to 12-million tons; second-ranking Steep Rock Iron Mines Ltd., from 2.2-million to 3.3-million. And one sign that demand will continue high is Japan's new contract to take up to 3-million tons through 1960.

It's true that West Germany's Krupp has temporarily turned thumbs down on any major Canadian steel project. It says a Canadian steel mill would cost between \$200-million and \$400-million—not including sales outlets—or up to twice what a plant would cost in Europe. However, the economic upheaval in Europe following the Suez crisis may spur Krupp and other major European steel fabricators to take a second look at Canadian possibilities.

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Business Abroad Briefs

French Premier Guy Mollet told parliament this week that French capital would be made available to Israel to build the proposed Elath-Haifa pipeline. Ex-Premier Pierre Mendes-France pressed Mollet to rush the project, said the pipeline could carry a third of those supplies for France that normally flow through the Suez Canal in tankers.

Bank of America's application to open a branch in Guatemala has been O.K.'d by the government with two stipulations: (1) it must put up a minimum of \$1-million in capital; (2) loans must be on capital, not against deposits. If Bank of America goes ahead, Guatemala would have its first U. S.-owned bank.

British industrial tidbits: Britain is testing its first jet plane with vertical take-off. It's powered by five Rolls-Royce jets. . . . Harry Ferguson's hydraulic transmission system for automobiles is being road-tested by Standard Motors and may appear in a new Standard car later. . . . Meanwhile, Standard has big plans for expanding the output of Massey-Harris-Ferguson tractors (BW—Oct. 13 '56, p143) to counter the recent sales offensive in Great Britain of International Harvester.

The Suez and Hungarian crises sent lots of Europe's smart money scurrying to cover in Swiss banks. Before the middle of December, Swiss Finance Ministry sources said, \$144.8-million moved into the country's big banks. There were also unconfirmed reports in London that the Russians had moved some dollar assets out of the U. S. to Swiss banks.

Two World Bank loans for steel expansion—\$20-million each—are going to Indian Iron & Steel Co., Ltd., privately owned Indian company, and Japan's Kawasaki Steel Corp. IISCO, India's second-largest steel producer, needs the loan to boost annual rolling capacity to 800,000 tons. Kawasaki will use its loan to build a strip mill.



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Editor Caswell Speare (right) visits Weighmaster John L. Colligan at New Jersey State Weighing Station on Route 46. In preparing August article, FLEETOWNER staff inspected truck weighing stations from coast to coast.

Weigh Editorial Impact?

Sure. How? You can survey. You can interview. You can questionnaire. *But you get your best gage when the reader himself tells you.*

Want an example? In August, FLEET OWNER, McGraw-Hill's magazine of trucking, published a 16-page booklet on "Truck Weighing." Six weeks after the article appeared more than 600 readers had written for reprints . . . 150 congratulatory letters and reprint requests had come from Governors, U. S. Senators, highway commissioners, weights and measures officials and heads of state police. And letters are still coming in at the rate of 10 a day.

Why such a terrific impact? Because truck weighing has been a constant problem in the industry . . . because this was the *first time* all the known facts on the subject were pulled together in one publication . . . because FLEET OWNER readers needed the information to do their day-to-day jobs better . . . and because the design, layout and writing made the article easy to read and simplified the understanding of a complex subject.

This is typical of all McGraw-Hill magazines. Typical because their editors have a feet-on-the-ground awareness of what their readers need to help them do their jobs better.

In the case of FLEET OWNER's editor, Caswell Speare, this awareness grows naturally from his 14 years practical experience in transportation, service with the U. S. Army Transportation Corps and editing transportation magazines. And he's backed up by an 8-man staff that traveled over 250,000 miles in 1955 to get the news as it happened . . . looking for

new ideas as they're put to work.

FLEET OWNER editors get around—from front office to grease pit, from "truck stops" to state-operated weighing stations. By going where trucking operations are, the FLEET OWNER staff can consistently produce articles with impact . . . articles that help the readers do their jobs better, more efficiently and at a lower cost.

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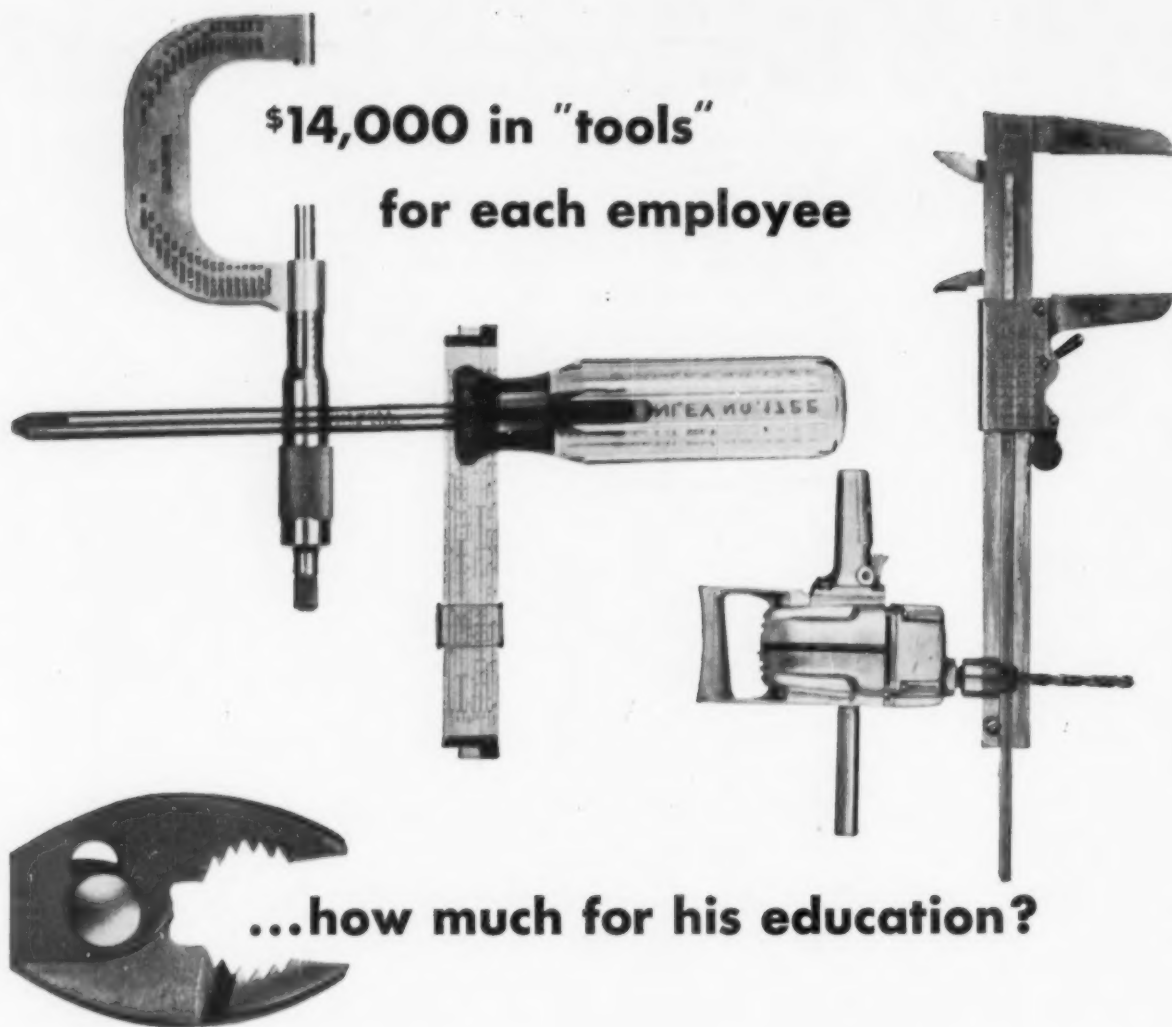
"Truck Weighing" is an excellent example of McGraw-Hill's fast-reading editorial technique for handling of complex engineering subjects. If you'd like to see a copy, write to Caswell Speare, Editor, FLEET OWNER, 330 West 42nd Street, New York 36, N. Y.

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PERSONAL BUSINESS

BUSINESS WEEK

DEC. 29, 1956



The turn of the year is the traditional time for swearing off bad habits, for latching onto new modes of living. If you decide in your own stock-taking that a new hobby would be desirable, **don't bypass the idea of learning to play a musical instrument just because you consider yourself too old to learn new tricks.**

Music-making is enjoying a boom. The number of Americans who play instruments has nearly doubled in the past 20 years, while population was rising less than one-third. Not all of the increase is among kids, either.

Many a busy executive is finding relaxation, release from the day's nervous tension, through playing an instrument. There are musical instruments for all degrees of aptitude, for self-expression through all kinds of music from cowboy to classical. Playing develops coordination, too.

Don't assume that if you adopt an instrument you'll have to go through the tedious exercises of your childhood days. That kind of frustration has been eliminated in the new approach to music teaching. You'll be playing real tunes almost from the start. You'll learn in about half the time it took 30 years ago—and you'll like it. You will be a better musician because your interest is heartfelt.

You have a wide choice of instruments that you can take up readily, regardless of age. Your choice should be governed by the kind of music you like. Of course, the piano is a basic musical instrument—19-million Americans play it. And ability to play the piano helps in learning other instruments.

The chord organ is probably the easiest of all instruments to learn. Then come the harmonica, ukulele, guitar, banjo, piano accordion, the piano itself, recorder, flute, other woodwinds, brasses, and the bowed strings.

If you don't want to invest in a piano or organ, **one of the fretted instruments—banjo, ukulele, guitar—may suit your taste.** They're fine for playing alone or as an accompaniment for singing or for certain other instruments. They're easy to learn—it's simply a matter of strumming chords.

Also recommended is the flute-like recorder. This has a range of two octaves, comes in four voices (soprano, alto, tenor, and bass), has good tone and resonance, can be played alone or with other instruments.

Musical instruments come in all price classes. You can get a recorder from \$3.50 to \$60, a uke from \$5 up, a guitar from \$16.50 up, a banjo from \$45 to \$100. A piano will run \$500 to \$6,900.

In many instruments, an inexpensive model is quite adequate for the beginner. You can begin learning it through the instruction book that's usually included. This should carry you through the fundamentals, equip you to play simple tunes. Then you'll probably want to take lessons.

Almost any music store can recommend a good teacher, or you can check with public and private schools in your area—many of their music teachers give private lessons. In larger cities, most Y's and schools have evening classes for adults, either free or at a nominal fee.

Fees for lessons range widely. The minimum in small towns runs about \$2 an hour; in cities, you may have to pay up to \$10 or \$20 an hour. **Experts say a beginner can get his money's worth at \$4 or \$5 an hour.**

It's wise to go at the lessons gradually. Start off with one or two half-hours a week. As you gain proficiency, you'll probably want to increase the duration and number of lessons.

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

DEC. 29, 1956

Most beginners find their musical outlet in playing for their own amusement or as part of a family group. However, if you yearn for one of the less conventional instruments—the oboe, bassoon, trombone, French horn—you can still find ways to fit it into its proper musical frame. There are accompaniment records—both classical and jazz—for the phonograph, with sheet music for the part you're to play. Or you can join a community band or amateur symphony, even help to start one, if your area has none. The American Music Conference, 332 So. Michigan Ave., Chicago 3, Ill., can give you advice on organizing such a group.

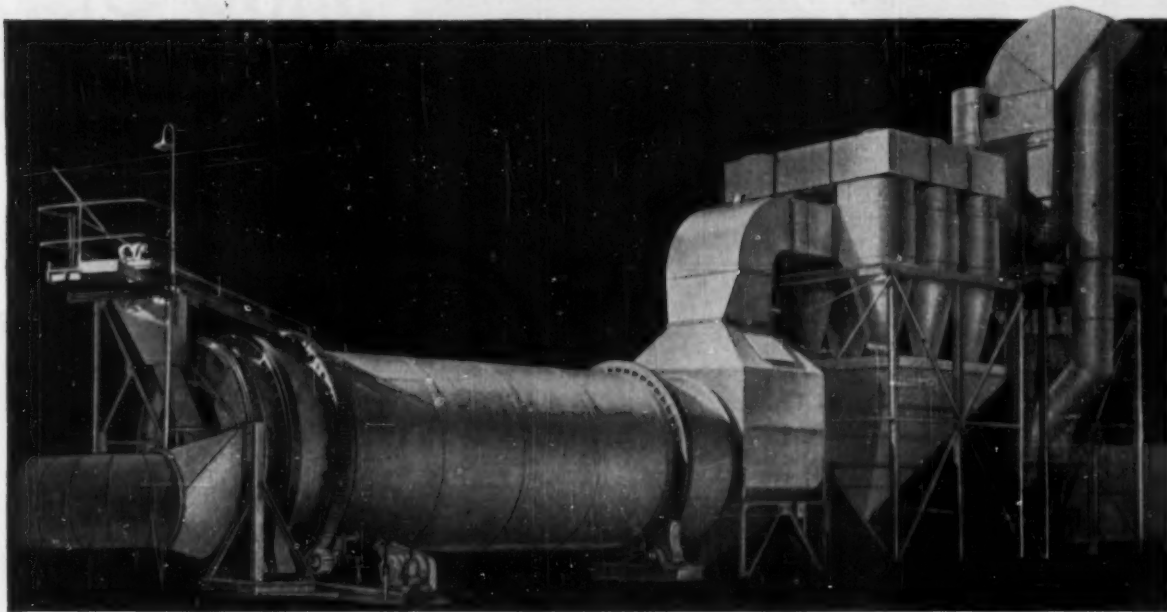
Out-of-towners who like to attend Broadway shows are turning more and more to ticket clubs as a means of getting good seats for current and upcoming productions. Among New York's leading ticket clubs are:

- **Play-of-the-Month Guild** (545 5th Ave.), probably the largest. A \$15 annual membership for two persons entitles you, but does not obligate you, to buy a pair of seats to each of about 24 shows a year. You pay box office prices but are guaranteed good seats. Hits such as Auntie Mame and Happy Hunting are included in the current list.
- **The Theatregoers** (55 West 42nd St.) also charges \$15 a year for a couple, offers seats at box office prices to any or all of 24 shows—hits included. Recent special offering, now withdrawn but probably soon to be resumed: a guarantee of the first 10 rows of the orchestra for all bookings, at a fee of \$30.
- **Stubbs Preview Club** (246 West 44th St.), the city's only ticket club that specializes in preview performances. These are usually played one or two nights before the formal Broadway opening. A fee of \$3 a year for a couple covers 10 shows. You get up to 50% off on box office prices.
- **The Theatre Guild** (23 West 53rd St.), the show-producing group, has a season subscription plan. The current season—October through May—includes such hits as The Apple Cart, with Maurice Evans, and The Bells Are Ringing, with Judy Holliday. Orchestra seats for this season cost \$37.35. Subscriptions are being taken now for the season that opens next fall.

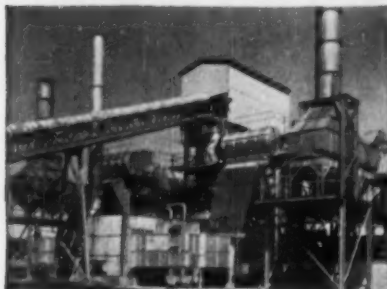
In Florida this winter, you can rent an auto-boat combination. The boat, hauled on a trailer behind the car, is fully equipped for either fishing, water-skiing, or just plain cruising. The package deal, called Sea-Fari, is offered all over Florida by Couture Rent-a-Car-Service at \$110 a week, plus 10¢ a mile for the car. By next summer, it will be available also in New York, Chicago, Denver, and Dallas.

Live to Enjoy the Money You Make, a new book by Lelord Kordel (World, \$3.50), is billed by its publishers as "a challenging guide to sane and relaxed living in today's overtense world." It talks about eating, sleeping, and in-between—a guide for those who want to turn over a new leaf this New Year. It makes good sense.

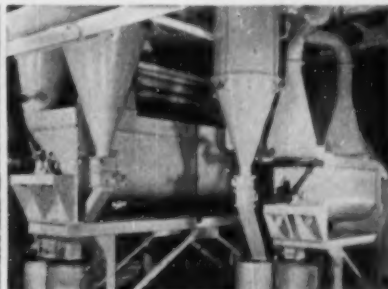
Manners and modes: After months of alloy research by Alcoa, the first golf putter with an aluminum shaft is on the market. . . . Alligator wallets, belts, and other accessories are bound to go up in price—the 'gators in Louisiana are dying off. . . . A survey shows medical students with more headaches than other vocational groups—80% of those questioned have 'em. Business executives rated second—with 77%.



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BUSY PRESIDENT Goddard Lieberson of Columbia Records directs show recording of *Bells Are Ringing*.

PLAYBACK gets intent ear from conductor Milton Rosenstock (right), singer Lawrence.

Show Disks

Broadway's hit productions can mean hit recordings, too, even topping the golden mark of 1-million sales. *My Fair Lady* disks actually did better than box office receipts.



RECORDING the show songs, Judy



Give Pop Albums a Push

Judy Holliday and her cohorts in the cast of *Bells Are Ringing* hope that the extra-curricular activity they are indulging in (pictures) will result in a hit recording like *My Fair Lady*.

Columbia Records hopes so, too. Over the past year, the recording of *My Fair Lady* has proved the hottest single package—or LP album—in the

business today. At retail, record sales have outgrossed the box office take of the show. (Columbia's figures: record sales—\$5.1-million; box office receipts—close to \$2.8-million.)

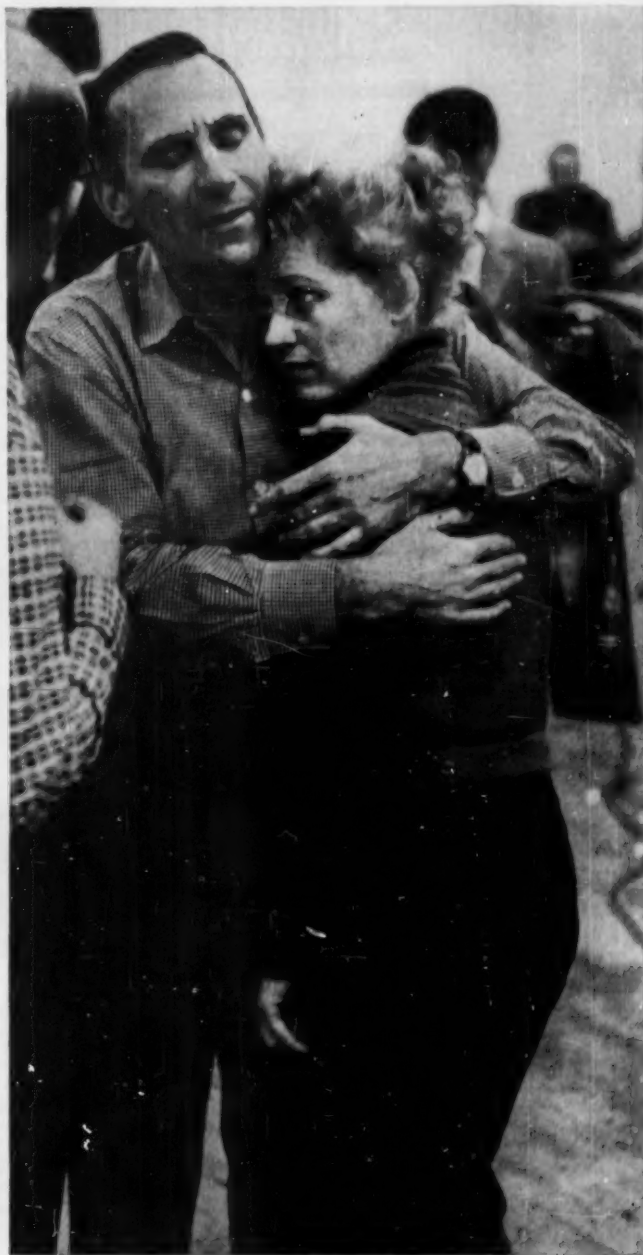
Record albums that reach 1-million totals, or even half a million, are scarce. A single artist may perhaps achieve this with a single LP album, but Columbia

maintains that in the past 20 years it has been the original-cast Broadway shows that have hit this figure: *Oklahoma!* and *South Pacific*, each over a million; *Carousel* and *Guys and Dolls*, about half a million.

• **Long Pull**—But it took the earlier shows from five to 15 years to get this far. *My Fair Lady* is close to the 1-mil-



Holliday and Sydney Chaplin go through their paces.



TIRED STAR

collapses at day's end. Recording such a show costs up to \$25,000.



ORCHESTRATION point comes up in discussion of Lieberman, orchestrator Robert Russell Bennett, and Rosenstock.



FRIENDLY OKLAHOMA LEGISLATURE

For 15 years every change in Oklahoma's tax laws has benefitted industry. Oklahoma is one of the few states to reduce taxes since World War II. And a constitutional amendment (1941) prohibits deficit spending by the State. Some tax advantages in Oklahoma are:

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Bankers Trust Company, is paneled with fire-resistant Cherry Weldwood. Archt.: Shreve, Lamb and Harmon. Designer: George Hunt. Installed by William Somerville, Inc.) Your architect and many business acquaintances can tell you more of Weldwood Paneling's advantages. Or write for a copy of "Weldwood Functional Beauty for Business and Institutional Interiors."

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lion figure (\$50,000 to date) after only eight months.

It isn't happening in New York City alone. San Francisco is the second best show album buyer—far from Broadway's glare and glare. Philadelphia and Boston, which often see the shows before New York does, rank third and fourth. Hartford, Conn., is next; then Chicago, Los Angeles, Detroit. New Orleans' cosmopolitan market makes it a good show album buyer.

To be sure, as an RCA-Victor official points out, other pop records have risen fast, too; he doubts that on a country-wide basis the show albums have grown faster than others. Victor, whose Belafonte's Calypso is currently outselling My Fair Lady, views its name artist as properties, whose total output has far greater value than the big-show albums—that are always chancy and that seldom hit. Columbia agrees that its hit album, My Fair Lady, did more than its share to pull up Columbia's show album score. Nevertheless, two recent show recordings, Li'l Abner and Bells Are Ringing, have chalked up advance sales double the sales of two similar shows—Pajama Game and Kismet—in a similar period.

Industrywide, records are estimated to be up some 20% this year over last, for a total estimated retail sales of \$285-million. All albums are 26% ahead, and pop albums—which include the show albums—are up 60%.

• **The Top Target**—In the record business, LP albums (which are usually only one disk) are a hit if they reach 50,000 copies within three months. But it's the lure of hitting 500,000, or 1-million sale mark that keeps record companies coming after Broadway original-cast albums. Advance orders for the recorded Bells Are Ringing, at \$360,000 retail, top the \$166,500 box office take so far. Li'l Abner, with \$300,000 in records, runs above the \$230,000 box office. South Pacific's first-year sales of 1.3-million albums also outgrossed the show.

Figures such as these explain why the big record companies will negotiate for recording rights months before a show opens—sometimes even before the leading roles are cast. It's why they are willing to pick up the tab for the live show—to be sure to have first crack at the recording. RCA Victor backed Wish You Were Here and Call Me Madam; Columbia Broadcasting System, parent of Columbia Records, pumped \$350,000 into My Fair Lady, for TV rights and first bid on records (BW—Jul. 28 '56, p28).

• **"Singles"**—It used to be that a recording company would hold out inducements such as royalty advances or minimum guaranteed return to the show producers, but these practices are less common today. A key factor in today's bidding is not only the quality

of the show recording, but the number and quality of single recordings from the show that the company will make; "singles" are usually 45's, with two songs to a record. These retail at about 89¢ for a 45, or 98¢ for a 78. The singles factor is important because a single record can sell 1-million copies a lot more readily than an album, and the songwriters and copyright owners get more money from them than from the show itself. One good single, by a top artist, can sometimes make a show. Victor cites what its recording of the title song for *Wish You Were Here* accomplished as an example—a show that was originally panned by the New York critics.

However glowing the picture when a company gets hold of a smash hit, the going isn't guaranteed to be easy. Shows and recordings of them can fall on their faces. When they do, it's a highly costly failure—as the *Girl in the Pink Tights* was, for Columbia. Total royalties on show albums are 10% of the record company's sales; this is higher than for any other type of recording, except perhaps some symphonies. That's because so many people divvy up the 10%—producer, artists, composers.

- **In a Hurry**—The cost of making the record runs from \$18,000 to \$24,000. In the long day of recording, which may start around 10 a.m. and run until midnight, the performers receive a week's salary.

Thus, while record companies' sales departments love a show album, the accounting departments aren't always so sure. Even with the higher-than-average retail price (usually about \$6), the company's net profit is somewhat lower than on other kinds because of the high cost.

- **It Takes Money**—The cost factor limits the field pretty much. Most of the big shows have been done by Columbia or Victor. "We haven't anyone who can put out \$350,000 for us," says an official of another recording company.

Decca has done *Can Can* and *By the Beautiful Sea*. Victor in the last year or so has had *Damn Yankee*, *Make a Wish*, and reports fast orders on its newest, *Happy Hunting*. Right now Columbia, with *My Fair Lady*, *Li'l Abner*, *Bells Are Ringing*, and *The Most Happy Fella*, is sitting pretty in the show business.

Columbia folk attribute much of its recent flurry of show successes to its new president, Goddard Lieberson. He personally auditions shows, turns up at the studio on a Sunday morning to supervise the recording session. He put South Pacific on records for Columbia in the days before he was president. "It's like finding Harlow Curtice able to build a Cadillac," comments a Columbia spokesman. **END**

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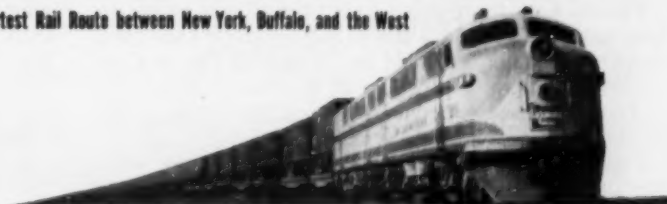
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In Marketing

• • •

Schenley Appeals to Supreme Court For Relief From Aging Whiskey Tax Law

Schenley Industries, Inc., the nation's third largest liquor company, is taking its long-time fight against the "force out" tax law to the U. S. Supreme Court. The law provides that spirits in government bonded warehouses must be removed after eight years, and a \$10.50 a gal. tax paid, whether or not the whiskey has been sold. Last February, Schenley filed in federal court for an injunction to restrain the government from collecting future taxes under this law. Schenley argued that since the tax has to be paid whether or not there is a buyer, it is a direct property tax rather than an excise tax, and hence unconstitutional. In October, a three-judge court dismissed the suit without ruling on the constitutional question (BW-Oct. 27'56,p62). Schenley has now filed an appeal.

There's a lot at stake on the outcome of the high court decision. According to Schenley, the U. S. liquor industry has more than 50-million gal. of spirits that will be forced out of bond at a tax cost of over a half-billion dollars in the next three years. Schenley has a big reserve.

Most of the industry's backlog was built up about the time of the Korean War when distillers were afraid they might be shut down. And at the same time that inventories of aging whiskeys were increased, consumption declined. If the law remains in effect, Schenley and other distillers will be faced with a whopping tax bill. The law provides three remedies; (1) exporting the reserve, (2) redistilling it, or (3) destroying it. Schenley points out that there is practically no export market, and both redistillation and destruction involve severe economic loss.

Schenley has been battling the tax provision for years. Last year, for example, it pushed for legislation to amend the law (BW-Aug.6'55,p56). A bill is currently in committee and Schenley feels the chances for action are good.

Taking a new tack, in October last year the distiller filed a claim with Internal Revenue Service for refunds of taxes already paid, amounting to some \$117-million (BW-Nov.5'55,p137). These claims were based on questions of the constitutionality of the law. Largely to speed up disposition of its claims, Schenley then filed for the injunction that was denied last October. Now the decision is up to the Supreme Court.

• • •

French Women Will Get a Peek At the American Dream Kitchen

French women are going to get the chance to see an ultra modern American kitchen, and to express their ideas about what a kitchen should be. Frigidaire Div. of General Motors Corp. will display its Kitchen of Tomorrow at France's largest national home show, at the Salon des Art Menagers in Paris.

French housewives will be surveyed to find out what sort of appliances they would most like to see in their

kitchens. American women have already been asked these questions, and Frigidaire researchers will compare the two sets of views.

The kitchen is experimental in design, but is operating fully. Earlier this year, American housewives inspected it while the kitchen was on tour with the GM Motorama. Here are the new-fangled features: an ultrasonic dishwasher that cleans, sterilizes, and dries dishes in 3 min., using inaudible sound waves; an induction range that cooks on a marble top without getting hot; a rotating refrigerator that can be loaded from outside the house; a push-button recipe maker that is activated by coded IBM cards to measure out dry ingredients; and a serving cart that moves by push button.

• • •

The Rosy Forecast for 1957: More Sales and Bigger Profits

Here's what three marketing experts foresee for their respective industries in 1957:

Judson S. Sayre, president of Norge Div., Borg-Warner Corp., Chicago, predicts that next year over-all sales of 11 principal major appliances will increase 2%, from 17,165,000 units to 17,550,000 units. Sayre says next year the appliance industry will be "as stable as ever." He adds that this year for the first time factory shipments of automatic washers will exceed refrigerator shipments. He expects this will also be true next year.

Alex Lewyt, president of the Lewyt Corp., sees the industry selling about 4-million cleaners next year, a gain of 400,000 units over this year. He adds that this will make 1957 the best in the industry's history.

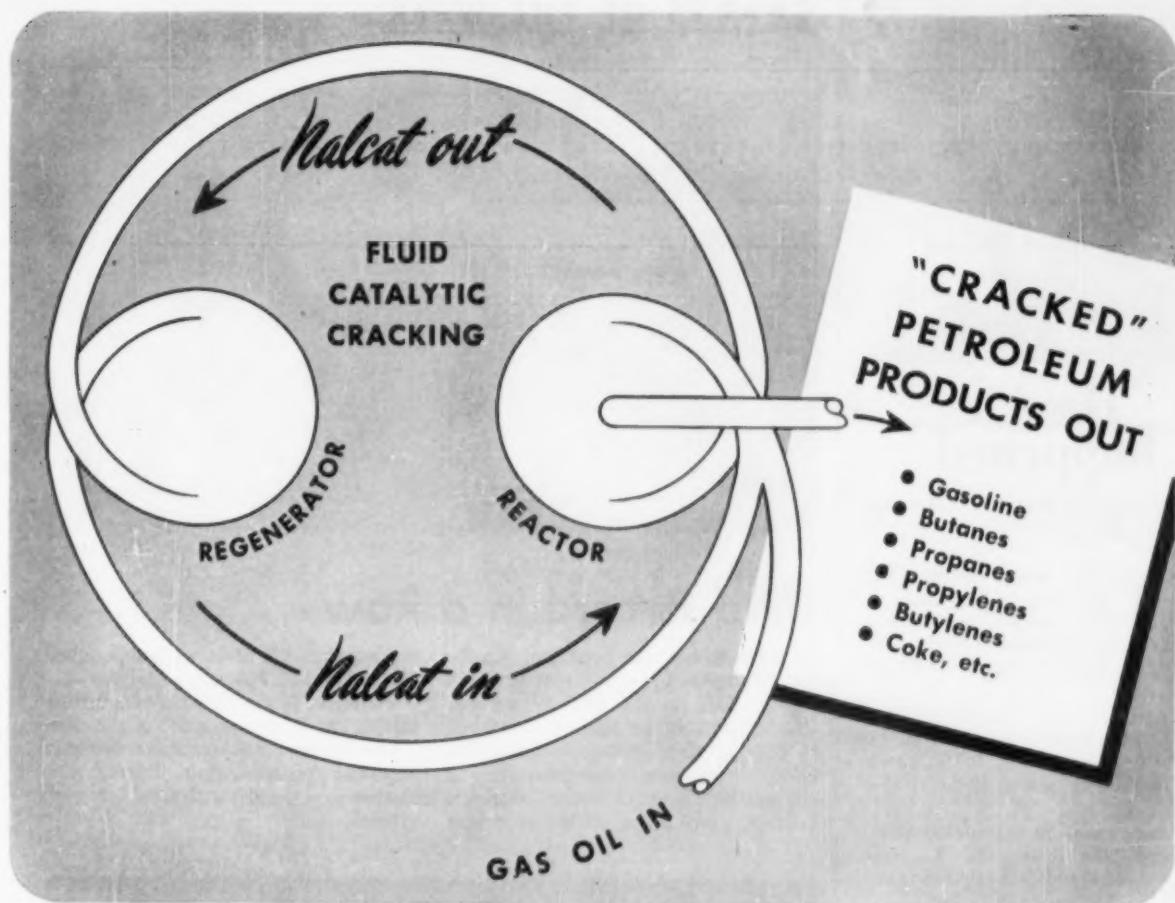
Steve Masters, president of Masters, Inc., New York discount house (BW-Oct.13'56,p176), predicts that next year discount houses will do at least 25% more business than during 1956. This type of outlet currently is estimated to do some \$750-million in retail sales. Masters noted that discount houses are consolidating their place in American marketing, and the larger houses are tending to move toward chain operations.

• • •

Marketing Briefs

E. J. Korvette, Inc., New York, one of the country's big discount houses, which became in part publicly owned this year, has issued its first annual report for fiscal year ended Sept. 30. The chain showed a 33% increase in net income, with \$1,558,876 this year against \$1,175,740 last year. Sales jumped 51% from \$36,292,393 to \$54,847,140 for the same period. Korvette added four new stores during the year.

Two of the country's big carpet makers have announced for next year carpets made of three new synthetic fibers. Firth Industries, Inc., will introduce the first carpets made of 100% Acrilan, Chemstrand Corp.'s brand of acrylic fiber. And C. H. Masland & Sons will put the first carpets made of another acrylic fiber, Union Carbide Corp.'s Dynel, as well as carpets of Tycora, a polyamide yarn (akin to nylon) made by the Textured Yarn Co.



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Pictures of the Hartford Stag hang in homes and offices all over the world.

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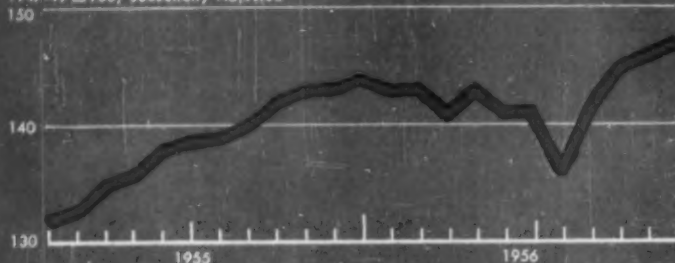
BUSINESS WEEK

P. O. Box 12 N. Y. 36, N. Y.

CHARTS OF THE WEEK

Industrial Production

1947-49 = 100, Seasonally Adjusted



Data: Federal Reserve Board.

BUSINESS WEEK

Third Record in a Row

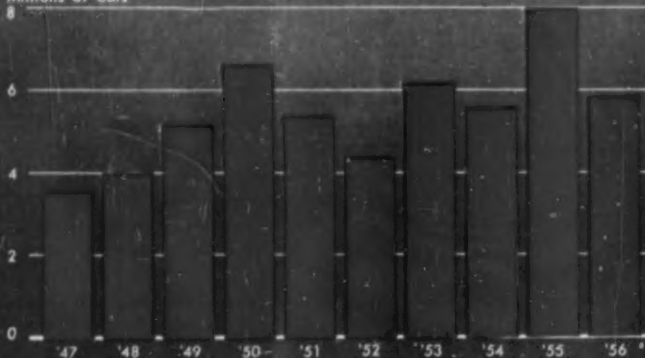
In November, the output of the nation's factories and mines rose to a new high—147% of the 1947-49 average, after adjustment for seasonal variation. It was the third consecutive monthly record. Production of both durable and non-durable manufacturers surpassed their previous highs. Minerals output

was less than 1% below its peak, reached in January and February, 1956.

Industrial production declined slightly during the first six months of the year. Then the steel strike pulled it lower in July and August. But in September it started its upward march into new high ground.

U. S. Auto Production

Millions of Cars



Data: Ward's Automotive Reports.

BUSINESS WEEK

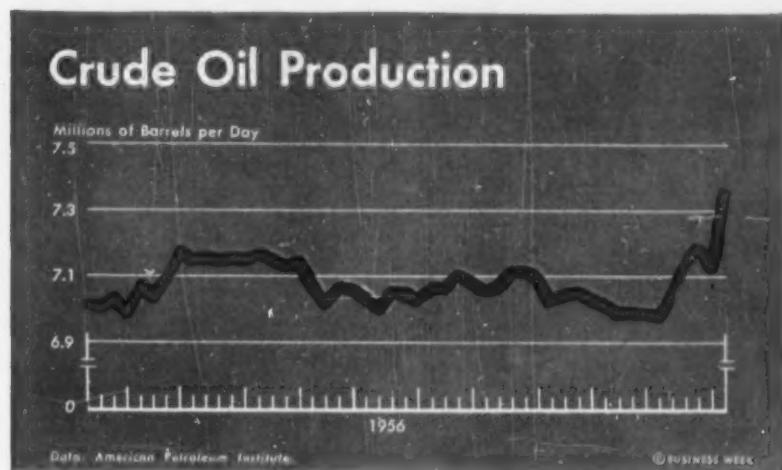
1956 Noses Into Fourth Place

When the final tally is in for 1956, U.S. auto production for the year is not expected to go much beyond 5.8-million units. That's a 27% drop from 1955's all-time peak—but it still makes 1956 the fourth highest year ever. The unbeaten

1955 record stands at 7,942,000 units. Second place is held by 1950 with its 6,675,000, with 1953's 6,135,000 in third position. For autos and trucks combined, 1956 will also be fourth—falling just short of 7-million units.

Among the auto makes, 1956 brought some shifts in market shares. Chevrolet's share of total output rose from 23% in 1955 to about 28% this year, and Ford's

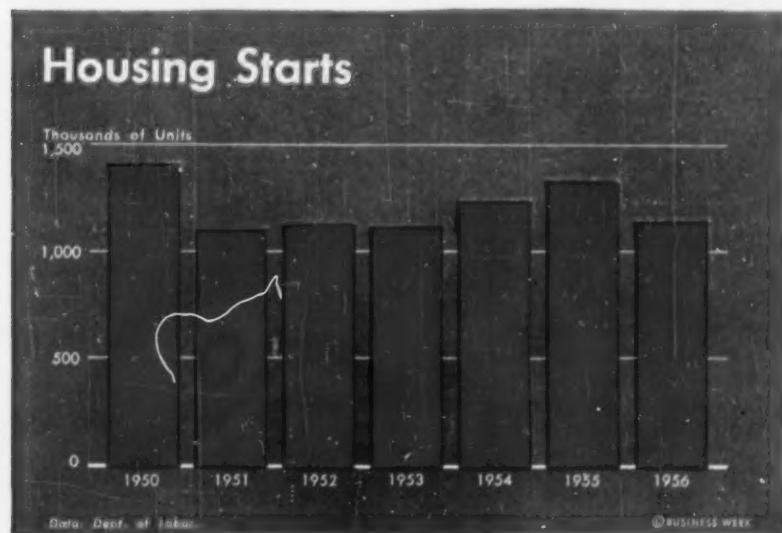
from 22% to a little over 23%. But Buick dropped from nearly 10% in 1955 to about 9%, Plymouth from over 9% to something under 8%.



Thriving on a Crisis

Domestic crude oil production has shot up to a new high, increasing at the rate of 220,000 bbl. per day in one week. The sharp rises followed increases in state output quotas to help meet short-

ages resulting from the Middle East crisis. The rise brought crude oil production 6% above the year-ago level. Up to that time, the year-to-year gap had been about 4%.



Only Fourth Highest Year

When the final figures are in, housing starts for the year 1956 will show a decline of about 15% from 1955. This would put the total close to 1952's level and class 1956 as the fourth or fifth highest year in history. According

to official figures for the first 11 months, 1,055,000 dwelling units had been started—almost 16% less than a year earlier. Even should December starts equal the year-ago level, the total for the year will reach only 1,130,000.



Costly new equipment is not always the sole answer to production cost problems. Often the wrong raw material may completely nullify expected savings from heavy capital investments in modern machinery.

Consider the case of one manufacturer who installed expensive new forming equipment but was unable to up production to the expected level. Material being formed was cold rolled strip 4" x .060", AISI 1050 steel processed to standard gauge tolerances (.0567" to .0632").

When **CMP** Precision Cold Rolled Strip Steel ordered to a 60% gauge restriction (.0587" to .0613") was furnished, production immediately moved up to the rated capacity of the machines and has remained there.

In addition to increased production, because of the minimization of down time, an incidental and important benefit was the increase in yield per **CMP** ton processed because rejections and out of tolerance parts were eliminated.

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Tight Money for Another Year

- In fact, Wall Streeters say it may get tighter, with strong demand both for long and short-term credit.
- For the moment, the market fears the Fed may boost the discount rate right after New Year's.
- Even if it doesn't, it would probably take a real change of business climate to ease the squeeze.

The money market this week girded for another year of tight money. As Wall Streeters see it, there is no escape in 1957. The demand for both short and long-term credit is expected to be strong. And with fears of inflation still in the air, the Federal Reserve Board is likely to keep a tight rein on the money supply. The result: high interest rates and a scarcity of credit.

The immediate fear in the money market is that just after New Year's Day, the Fed will again raise the discount rate—the rate that member banks pay for temporary borrowings from the Fed. In the past two years, there have been six successive hikes in the discount rate, bringing it up from 1½% to the present 3%. The cost of money to all other borrowers has shot up to the highest levels in 24 years.

• **Uncertainties**—There is a good chance, of course, that the Federal Reserve will not set off another round of increases. The money managers were expected to go up just after the November elections, but they then saw enough uncertainties in the economic picture to hold off (BW—Nov. 17 '56, p. 39). These same uncertainties may prevent any further increase of pressure on the money market.

Though the Fed may hold its fire, the money market this week did not believe it. On the contrary, interest rates had been increased all along the line in anticipation of the Fed's next move. The prevailing feeling is that the new year will pick up where the old year left off—with the cost of borrowing on the rise and a continuing pinch in the availability of credit.

• **To the Banks**—The Fed itself has not been pressing its tight money policy since early fall. In fact, the money managers, in order to keep the squeeze from being too severe, have been supplying funds much more aggressively to the banking system this year than they did in 1955.

But this did not mean any relaxation in the tightening process, mainly because both banks and businesses no

longer have the liquid resources they once had. The amount of easing the Fed carried out had only the effect of keeping the squeeze from getting out of hand.

Up until now, the progressive tightening of the credit brakes has not put a crimp in economic activity. True, housing and autos suffered in 1956, but the economy as a whole has been booming. And much of the boom has been financed by a combination of bank credit and capital market funds.

The banking system, for example, increased its loans during the past year by about \$7-billion. This increase was made possible in large part by a \$6.5-billion liquidation of government securities from the bank portfolios. There was also an increase of about \$1-billion in the total security issues for new capital for corporations and municipalities.

The banks' increasing use of the money market stems from the fact that savings are not keeping pace with investment. The rate of rise in individual savings did go up from 6% in 1955 to 7½% this year. But business, geared to a rapidly rising level of capital expenditures while funds generated internally climbed at a snail's pace, had to increase its external financing from \$9.5-billion in 1955 to \$20-billion in 1956.

• **Liquid Assets**—The strong demand for outside funds, and the Fed's clamp on the money supply, acted together to bring on this year's squeeze. As the year ends, corporations have less liquid assets than at any time in the postwar period. The banking system cannot continue to increase its loans at anything like the rate it did this year, because most banks no longer have the government bonds to liquidate in order to make loans. Those few banks that still hold governments are not anxious to sell them at today's depressed prices.

There is no question that the Fed's restrictive policy, in operation almost continuously since the beginning of 1955, has now reached the point where

very little additional pressure by the money managers has a very big impact on the money market. If the Fed had not supplied funds in big volume during the past two weeks, the money market, and especially the government bond market, would have collapsed. As it was, the drop in government bond prices was the sharpest in the memory of many dealers.

The government market was not the only one to be hard hit. There was an almost complete drought in the mortgage market; corporate bond prices were weak, and new offerings in the municipals market were selling at the highest prices since the 1920s.

• **Backlog**—Plainly, there is no relief in sight for the capital market. The volume of new offerings guarantees that interest costs will remain high and probably continue to rise. Even if the money managers ease up somewhat, there is such a backlog of offerings that borrowing costs will be firm. As one bond man puts it, "The only elasticity in interest rates these days is on the upside."

But while long-term money appears sure to be tight, and maybe even tighter, there is a possibility that short-term bank credit will ease slightly, at least for the first few months of 1957. Just after the turn of the year, there is a seasonal flow-back of funds to the banks, and if the Fed does not raise its discount rate and sop up excess reserves, the banks will be in an easier position.

Moreover, a good portion of the funds being raised in the capital market by corporations are ticketed to pay back short-term bank credits. The fact is that bank credit, which is normally used for building inventory and other short-term, seasonal purposes, has helped many companies to make a start on capital improvement projects. Now, many of these loans will be paid off, which should help relieve the intense pressure on the banks.

• **Flattened Curve**—If this happens, the yield curve that flattened in 1956 may reassert itself. Through most of the year, the cost of short-term credit was as high as the interest costs prevailing in the capital market. Indeed, for a short period in the spring, long-term money was actually cheaper than short-term.

This flat yield curve was a symptom of tight money. Almost constantly since the 1930s, long-term funds have been more expensive than short-term. But in the 1920s, short-term funds al-

ways commanded a higher price.

• **The Risks**—Higher interest on short-term funds can develop for a number of reasons. If the risks seem bigger than for long-term rates, then the yield pattern will alter. For example, the market may feel that long-term rates will go down. In that case, borrowers will hold back, depending on short-term credit to see them through the interim period before long-term money is cheaper. The result is a big demand for short-term funds, driving up the price. That's what happened early this year.

The same pattern emerges when the banks are confronted by a credit squeeze. They have to ration the available short-term credit, and increase its cost to all borrowers. Generally speaking, short-term funds are more volatile in terms of cost than long-term funds whenever money is scarce. This is what occurred in the second half of 1956.

• **Probabilities**—The 1957 pattern may continue to show little differentiation between short- and long-term interest rates; but the chances are that short-term rates will go down slightly while capital rates will rise. This could result in a return to the normal pattern of the past 25 years but on a higher level.

This does not mean that the banks will not be under pressure. Although the short-term credit needs of business may not be so strong next year, the lack of liquidity among corporations will probably result in heavy bank borrowings around the March tax date.

The real squeeze on business and the banks began last March, when tax borrowings reached a record high. Whether or not there actually is a similar squeeze next March, the threat of one hangs like a pall over the money market. Even if the position of the banks is easier, the psychology of the market is geared to continued tightness.

• **A Matter of Feeling**—Psychology plays a big role in the current market. Most Wall Street men now feel that tight money is here to stay. They feel it is improbable that the Fed will ease. But even if it does, they say, any increase in the supply of funds would only bring to the market a great many issues that have so far been postponed.

This is a switch in attitude from that of the same time last year. Then, after a period of increasingly tight money, the market was convinced that the Federal Reserve would ease. For the first few months of 1956, interest rates softened and the Fed itself marked time with a wait and see policy. But the March tax borrowings were followed by a resumption of stringency.

Now the market has grown accustomed to even scarcer money and to rising interest rates. Investors are reluctant to bid on issues unless both quality and price are good. There is a definite



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feeling that interest costs will continue to climb next year.

• **Mortgages**—This psychological feeling will mean a big cut-back in mortgage commitments. The institutional mortgage lenders, such as the savings and loans associations and savings banks, will provide funds for new mortgages out of repayments. But the life insurance companies, which can choose among investments in more than one area, appear almost sure to cut back their mortgage commitments.

This year, the life insurance companies actually increased their mortgage holdings by over \$1.5-billion. But this increase largely represented commitments made in 1955. At present, in making their commitments for next year, the life insurance companies are switching from mortgages to higher yielding industrial issues.

The switch in the investment policy of the life insurance companies will probably bring housing starts down substantially by spring, but it will also mean some relief for the corporate market. In fact, some experts believe that the present fears of a tighter market will evaporate when the life insurance companies begin increasing their holdings of corporate issues.

• **Stimulant**—Those who see no possible breathing space contend that any increase in the funds looking for investment will only stimulate demand. However, one investment expert said that not only will there be a decrease in funds available for mortgages, but that demand for mortgage funds is slowing down. "The mortgage market looks to be running out of gas," he declares, "and it may be that corporate demand will follow."

Support for the notion that corporate demand for funds may be leveling off comes from some bankers, who report that their loans did not come up to expectations during the last few months. The increase in bank loans during the last half of the year was much below the level reached in the same period of 1955. These bankers argue that this may mean the end of the rising demand for short-term funds.

But others question this view. They point out that both the sales finance companies and metal firms were not making their usual borrowings due to Detroit's slowness in getting into production. And they expect these two areas of demand to be in the market heavily from now on.

As yet, there is no real drop in demand for funds by corporations. Any slackening of demand would probably arise out of a change in business expectations. The prospect is now for a continuation of high level activity next year. Unless this prospect undergoes a rapid alteration, business will find money tight, if not tighter. **END**



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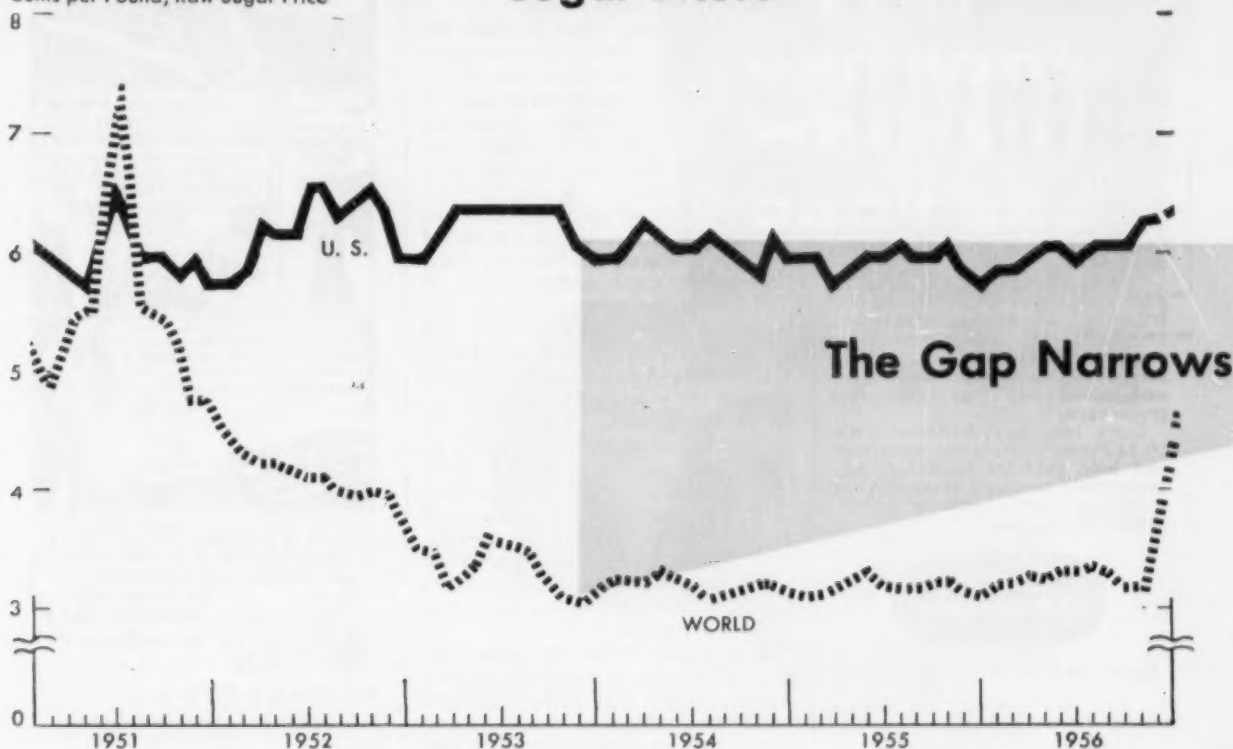
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Sugar Breaks Out of Its Rut

Sugar is losing its tag as one of those phlegmatic commodities that flounder along in a state of chronic oversupply. Its new liveliness and self-confidence show up most clearly in the sharp rally staged by world sugar prices as a reaction to the Suez crisis (chart).

Its new buoyancy also unsettled the domestic market this year, throwing domestic controls somewhat out of joint as they were brought to bear in an effort to curb the effects here of the world price surge. As one old-timer expressed it, "for the first time in more than 20 years, the market ignored government controls and quota rises and kept going higher and higher."

• **Balance**—Behind sugar's transformation is a story of better balance in its supply-demand relations. World consumption is rising steadily—it's up from 34.7-million tons in 1951 to an estimated 43.1-million tons this year.

Producers, eager to whittle down the surplus stocks that they were burdened with after Korea, haven't kept up with this growing thirst for sweets. This year's production, some 42.9-million

tons, will fall short of total consumption for the second straight year.

This doesn't mean a complete turnaround in sugar's position, of course. But the world price of raw sugar has moved up until it's only 14¢ from the domestic raw price, despite the fact that the domestic price is held at a high level by the system of government controls. The more even balance also means that the supply-demand scale is more susceptible to sudden shifts, as in the Suez crisis.

The changed position also points to further rises in prices, here and abroad, next year—unless it turns out that some of the recent demand has been for hoarding rather than consumption.

• **Doldrums**—World sugar prices have been in the doldrums since Korea—though that wasn't any new experience. The sweet has long had a notorious reputation as a commodity that becomes surplus in peacetime.

As soon as Korea-created shortages vanished—and that was quickly—producers felt the double sting of low prices and rising costs. Cuba alone, at the end

of the Korean conflict, found itself with a surplus of 2.4-million tons of sugar.

• **Surge of Demand**—It's only during the past year or so that rising consumption has made itself felt. The Food Agriculture Organization (FAO), which is responsible for the estimate of 43.1-million tons consumption for this year, reckons this as a gain of about 1.6-million tons over last year. This year's figure is some 2.8-million tons over 1954.

FAO's calculation is fairly exact for the free world—that is for world consumption minus the Soviet Union, Eastern Europe, and Red China. It reports a free world rise to 34.7-million tons in 1955—or 1.4-million tons over the 1954 figure. In the excluded countries, it guesses that consumption rose from about 6.6-million tons in 1954 to 7-million in 1955.

• **Lag of Production**—In the face of this rise in demand, various factors have kept production lagging behind. One factor has been the desire to shave surplus stocks. Another has been the export restrictions placed on producers by the International Sugar Council, the

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regulatory body under the International Sugar Agreement, which provides for export quotas for producer-members as a means of stabilizing the movement of sugar in the world market.

A third limiting factor has been the failure of the European beet industry to take root in the postwar decade. F. O. Licht, European sugar statistician, last week estimated Europe's production this year at only 13.8-million tons, against 14-million last year and 12.9-million in 1954.

The weather, as usual, has also taken its toll. The Soviet Union, considered a major producer, has had to resort often to the sugar market because of crop failures. In parts of Asia, notably India, bad weather and a low cane yield have kept crops below last year's levels.

• **Dwindling**—You see the double effect of rising use and lagging output in the dwindling of stocks. Take Cuba, by far the largest exporter of sugar. Its stocks, once unpalatable lumps in the island's economy, have been melting away. By yearend, Cuba's inventories will be between 600,000 and 700,000 tons. Producers gleefully term this a "barely normal carryover"—compared to yearend stocks of 1.5-million tons a year ago, 1.8-million at 1954's close.

• **U. S. Impact**—With this tighter supply-demand setup, it wasn't any surprise that a crisis like Suez would trigger off world raw sugar prices. Nor was it surprising that booming world prices took domestic raws along for at least a part of the ride. For while the rigid U. S. quota system practically isolates the U. S. from the world market, forces operating in the world market obviously can't be ignored. Still, the battering impact of the world price surge on domestic controls was out of the ordinary.

The U. S. sugar price is controlled by the Sugar Act of 1948 and its amendments. Under the original act, 4.4-million tons out of a total U. S. consumption of about 8-million tons were to be marketed by the domestic beet, industry, mainland cane growers, Hawaii, Puerto Rico, the Philippines, and the Virgin Islands. The rest—including any additional tonnage deemed necessary to meet demands—went to foreign producers, principally Cuba.

Last May, domestic producers got the mix changed somewhat. Existing quotas remained unchanged percentage-wise, but Cuba was cut out of a big chunk of any additional tonnage that might be allotted.

These controls have kept sugar prices here in recent years at almost twice the level elsewhere. But the aim has been not only high prices, but price stability—and this year the battle for stability was tough.

• **Strain**—The Sugar Div. of the Dept. of Agriculture set the 1956 marketable

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quota at 8,350,000 tons. For the first six months, all went well, with the New York price for raw sugar ranging from 5.83¢ a lb. to 6.09¢.

Then pressures piled up. Summer seasonal demands of ice cream producers, soft drink makers, and canners took hold. Beet producers, industry sources say, held back on marketing in expectation of a rise. Eastern refiners had to turn to foreign producers—and that meant higher prices than usual, for foreign producers were getting heavy runs from Europe and Asia.

The Dept. of Agriculture resorted to quota boosts (eight in all, bringing the total quota to 9-million tons) to stem rising prices by throwing more sugar on the market. But the quota hikes seemed only to add fuel to the fire, and the market blithely ignored the control efforts.

Eventually the rise slacked off, partly because the Suez crisis dimmed and partly because Cuban speculators eased off on futures speculation. Meanwhile, the domestic raw price reached 6.50¢ a lb., and refined prices, joining the fun, hit 33-year peaks.

• **New Medicine**—When quota boosts failed to check the rise, Agriculture permitted imports of over-quota raws to be stored until January. This let refiners make use of every last pound of their 1956 quota and reserve stocks, and still have sugar for next year.

Agriculture will also help refiners—and consumers, too, it hopes—by setting the 1957 quota at 8.8-million tons in an effort to keep prices stable for the early months of 1957, at least. Industry spokesmen say the new figure is set at about the total consumption level they expect for next year.

• **Things to Come**—In looking ahead, you have to keep in mind that sugar is neither rare nor scarce, and that producers have a tendency to seek volume, rather than price, on the world market. Cuba, for example, hopes to boost production totals next year. To some this looks like a backward step in Cuba's policy of keeping production limited; but others say the increase won't be made unless demand is assured.

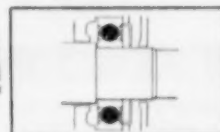
Many producers might like to throw off quota restrictions in view of current demand, but the International Sugar Agreement is a barrier—and memories of not-too-distant surpluses acted as a checkrein when producer-members of the agreement met recently in Geneva.

They did give themselves a little working room, though. The Sugar Council recently increased export quotas by 5%, bringing to 4.5-million tons the basic 1956 tonnages assigned to exporters. This will also become the initial 1957 export quota, allowing some more inventories onto the market in the early days of next year. **END**

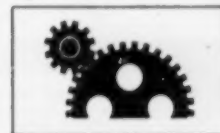
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In Commodities

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New Farm Legislation May Be Result Of Corn Growers' "No" to Benson Plan

There's pressure among some leaders in Congress for changes in the farm law passed last session. This movement stems from a referendum in which the corn farmers declined to take advantage of a program set up under the act—and backed by the Administration—to give them more acreage with lower price supports in 1957.

Instead, the old 1938 plan will apply to corn next year. The allotment will be 37.3-million acres, and price supports will be pegged at \$1.36 per bu. Under the rejected scheme advanced by Secy. of Agriculture Benson, acreage allotments would have totaled 51-million, with the support price \$1.31 per bu.

Benson's proposals were considered a step toward replacing the old control programs inherited from the New and Fair Deals, which, say some critics, encourage overproduction and surpluses. But corn growers, in turning thumbs down, showed their preference for the old ways if the alternative is lower price supports.

. . .

Titanium Industry's Baby Tips the Scale at 29-Million Lb.

A year-end review of the six-year-old titanium industry shows that the toddler is starting to take man-sized steps. T. W. Lippert, sales manager of Titanium Metals Corp. of America, reports that production of finished mill shapes totaled 10.6-million lb. this year, "25% higher than the most optimistic first-of-the-year estimates."

Titanium sponge production, the basic raw material, jumped to about 29-million lb.—nearly 21-million lb. ahead of last year. Lippert predicts that the industry will turn out between 50-million and 56-million lb. next year.

One sour note in the industry: Japanese imports of sponge into the U. S. totaled 3.5-million lb. this year—about three times the 1955 shipments. And it is expected that the imports will climb to an even higher level next year under the Commodity Credit Corp. barter agreements.

. . .

European Demand for Nickel Keeps Metal at Gray Market Prices

Premium price for nickel continues to be the rule. Despite International Nickel Co.'s new market price of 74¢ a lb. (BW—Dec. 15'56,p42), the "going" price is much higher. Last week there was a report that a small Canadian company had contracted to sell to European users at a minimum of \$1.50 a lb.

North Rankin Nickel Mines, Ltd., says it has two firm offers to sell 4-million lb. of nickel. Deliveries will begin next August, with 2-million lb. being shipped by the end of the year. Another 2-million lb. will be delivered in 1958.

The sale points to continued European demands, and to continued gray market prices until production picks up.

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Better Understanding With India

There has been a historic quality about the meetings just held in Washington between Pres. Eisenhower and Prime Minister Nehru of India. The friendly interchange between the leaders of the world's largest democracies, and their ability to find considerable common ground in approaching world affairs, undoubtedly marks a turning point in U.S. relations with India and, indeed, with all non-Western peoples. For this reason it seems likely that future historians will put this Nehru visit in the same category—for its significance though not, of course, its purpose—with the visits Winston Churchill paid Franklin Roosevelt during World War II.

It is possible to recognize this fact without approving everything Nehru has stood for in the past, or stands for today. It is equally possible, on the same basis, to go along with some of the main points Nehru made in his remarks at a reception given for him at the United Nations in New York. Among these points we would include Nehru's desire to have the cold war ended, his insistence that "countries dominated by other countries should cease to be dominated," and his stress on the need for early steps toward disarmament.

But we find it hard to understand why the Indian Prime Minister still hesitates to label the Soviet Union as the author of the cold war and the only real opponent of a disarmament agreement. We also find him wanting on two other counts: (1) his refusal to say that Egyptian Pres. Nasser, as well as Britain, France, and Israel, has strayed from the path of international "rectitude"; and (2) his failure to point out, as Vice-Pres. Nixon did recently, that the U.N. must find some way of dealing with Nasser-type behavior if it expects its members to give up the right to resort to force.

That said, we would also like to confess a certain nostalgia for the visits once paid us by Winston Churchill.

Happy Half

Now is the season when all good editors and economists, fully armed with the detailed statistics of the Joint Economic Committee, the Commerce Dept., the Bureau of Labor Statistics, the McGraw-Hill capital spending survey, and a shelf full of works on economic theory, peer anxiously at the New Year.

Thanks to the enormous development in economic information we have been able to penetrate the veil of the future further than ever before. We now can see with reasonable clarity about six months ahead. And all our evidence, buttressed by that powerful economic factor, momentum, assures that the six months ahead will be prosperous.

Out beyond June 30, though, the fog is still pretty thick. Will money stay tight all year long? Will cash-hungry corporations decide to cut back inventories, stretch out capital spending programs? Will consumers love or hate the 1958 autos that bloom in the fourth quarter?

Alas, the GNP projections, the economic indicators, and the consumer surveys help us little.

With complete confidence, therefore, we wish our readers a Happy Half New Year. And, somewhat more cautiously, a Happy Second Half, too!

Practical Policy

The decision of the New York State Power Authority to sell one-third of the energy developed by the St. Lawrence Seaway Project to the Reynolds Metal Co. merits the attention of all those interested in the public-vs.-private power controversy.

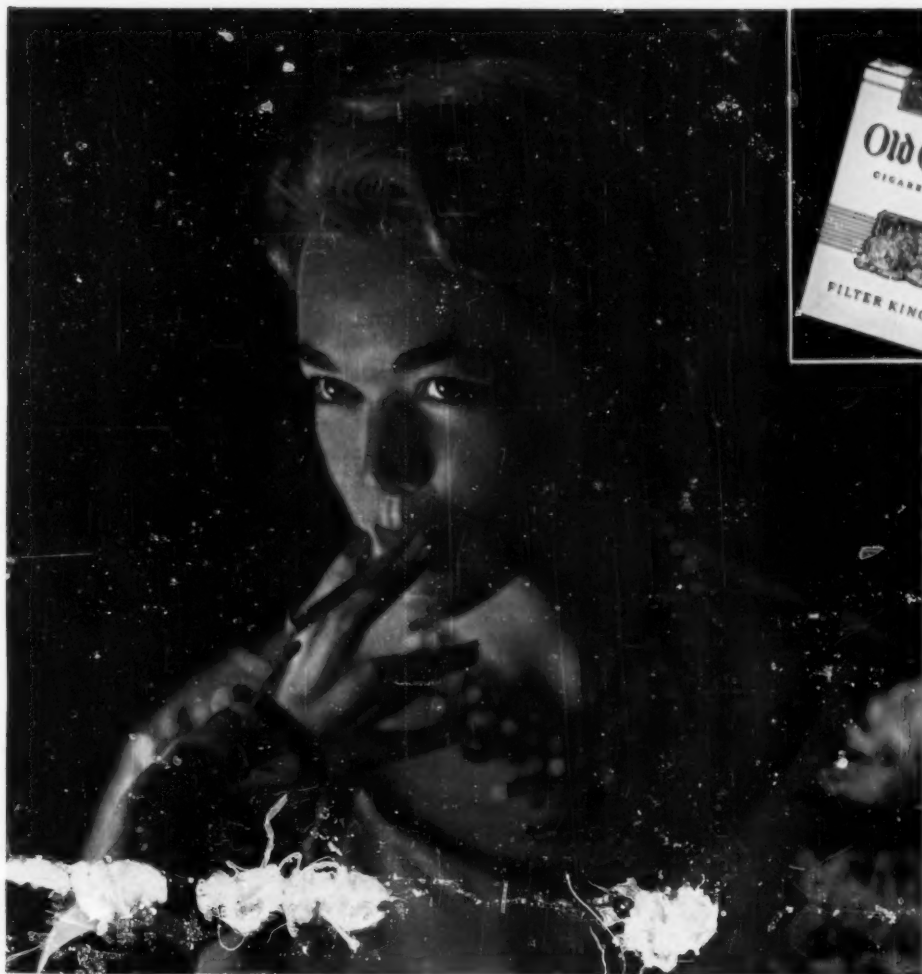
Like many other states, New York has had a policy of giving preference to domestic and rural consumers of state-developed power. And on the surface, the allocation provided to Reynolds appears a flouting of the preference principle.

But awarding a substantial portion of the power to industry does not necessarily mean a neglect of the domestic and rural consumers. The fact that their demand for power is not big enough to result in full utilization of the power available—now or in the foreseeable future. Reynolds, however, has made a firm commitment to use and pay for power on a year-round basis as soon as it erects a plant.

This itself will be of benefit to the public. The establishment of a new industry based on the power being made available will mean new jobs, new homes, and increased use of the power resources that the state controls.

Moreover, providing power to industry permits a more rational use of the resources available. Instead of piecemeal allocation, which is both expensive and wasteful, the state can make an equitable distribution based on demand and need. It means the financing of the project can be put on a business-like basis, so that the cost to the so-called preference consumer is, in the end, cheaper.

This is the merit of the plan. It has been attacked by some union and municipal groups on the stereotyped grounds that providing power to business is a "giveaway." But this is a political argument that does not fit with the economic facts. Selling the power to the customers—business or consumers—that can make immediate use of it is as much a responsibility of public officials as safeguarding the rights of the domestic and rural consumers.



Illustration—Courtesy of the P. LORILLARD COMPANY

9 adhesives protect a cigarette's fine taste

Few people know how freshness—*factory freshness* is preserved in making, packaging and shipping their favorite cigarette.

Adhesives (1) seal cigarette paper, (2) attach cork and filter tips, (3) laminate foil and paper linings, (4) seal paper packs, (5) attach revenue stamps, (6) seal cellophane wraps, (7) form and seal cartons, (8) close shipping cases, (9) attach shipping labels.

These 9 adhesives, which are made from resin, starch, dextrine and casein bases, must fulfill many requirements. They're colorless, tasteless, nontoxic, moisture resistant, nonstaining, heat sealing, high speed, and capable of bonding a wide range of surfaces.

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These Rubber Firemen Outwork Iron 3 to 1

WEARING problem at a large Eastern power plant was the cast iron pipe through which hundreds of tons of coal daily dropped from roof-top hoppers to pulverizers. The surprisingly abrasive coal chewed through the heavy pipe in a few short months. Added trouble came from frozen coal which sometimes clogged the lines.

Seeking an answer to the frequent, slow, costly replacement of pipe, engineers turned to the G.T.M.—Goodyear Technical Man—who specified **DIVERSIPIPE**—rugged, hand-built, *rubber* pipe. These flexible, steel-muscled “rubber firemen” greatly simplify installation, permit rapid rotation to distribute wear, even absorb sledge-hammer

beatings to loosen clogged coal and serve *over three times as long* as the iron pipe.

Handling problems you may have is a specialty of the G.T.M. He can quickly show you how dry materials, or practically anything pumpable, can be better moved at lower cost with one of the over 300 types of hose he has in actual production or the many more under development. Consult him through your Goodyear Distributor or write Goodyear, Industrial Products Division, Akron 16, Ohio.

YOUR GOODYEAR DISTRIBUTOR can quickly supply you with *Hose, Flat Belts, V-Belts, Packing or Rolls*. Look for him in the yellow pages of your Telephone Directory under “*Rubber Products*” or “*Rubber Goods*.”

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